



PROCEEDINGS
OF THE SEVENTH
SCIENTIFIC SESSION
OF THE MOSCOW
INTERNATIONAL COURSES
FOR PUBLIC HEALTH
ADMINISTRATORS

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MINISTRY OF HEALTH
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MINISTRY OF PUBLIC HEALTH
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BULGARIA

W H O — REGIONAL OFFICE FOR EUROPE

**DEVELOPMENT OF NATIONAL AND INTERNATIONAL HEALTH
MODERN TRENDS**

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PREFACE

The seventh scientific session of the Moscow International Courses of WHO displays an already established tradition of periodic accounts of the lecturers and students before the international medical public.

The proposed collection contains at first materials, which are results of investigations on important international and regional problems of public health. Among the authors are responsible collaborators of WHO and CEA, lecturers, investigators and authors with international renown.

The theoretical and methodologic topics of public health are the object of another interesting and important group of reports. They contain contributions to the theory of prevention, economic approach in public health, ensurance of the quality of medical care and other actual problems.

Considerable number of investigations are associated with the program approach in health protection of the population. A number of authors report the results of organization and medical-social experiments. Consideration is given to the results of the application of national programs for reduction of infant mortality, improvement of the informative ensurance of the purposeful health programs, secondary prevention and rehabilitation, analysis of the results of health practice in particular countices.

The reader will probably welcome with interest the publications of the section, devoted to the training of the leading health manpower and the actual problematics in this field. Here, according to a good tradition, an analytic account is published on the activity of the Moscow International Courses and their perspectives for the next period are delineated.

The organizers of the session express sincere thankfulness to the authors, as well as to the compilers and editors of the collection. Their work leaves behind a durable trail in the deeds of the Moscow International Courses, the authority of which as an international educational and investigative center on the problems of the organization and administration of public health continuously increases.

We hope that the readers will find interesting and stimulating ideas, results in the published materials, which will enrich their investigative and practical activity.

The authors and the compilers of the Collection will receive with gratitude the remarks and suggestions of the readers.

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INTERNATIONAL AND REGIONAL HEALTH CARE PROBLEMS

REGIONAL POLICY IN THE FIELD OF HEALTH PROTECTION IN EUROPE AND ITS SIGNIFICANCE FOR THE NATIONAL PLANS OF DEVELOPMENT OF HEALTH PROTECTION

A. Wojtczak (WHO)

Health is not only one of the fundamental rights of man, but also an exclusively valuable resource. The healthy individuals could completely realize their potential, while the healthy society could reach a maximal social and economic development.

On the 30th World Assembly of Health Protection in May 1977 it was decided that "the principal aim of the governments and of World Health Organization in the forthcoming decade has to be considered as the attainment by all citizens in the world about 2000-year such a level of health, which could allow them to conduct a socially and economically productive life". The insistence of this aim for the European region is marked by two facts:

1. notwithstanding the financial resources, released to the health protection sector, and the elaboration of new medicines and new medical technics during the last 30 years, the health level of the people is much lower, that it ought to be;

2. notwithstanding the high general level of development in the region, as well as of the science, economics and education in most countries, still we must confront problems for considerable differences in the health level.

Namely in the framework of this work, the representatives of the countries in the European region of WHO approved at the European Regional Committee in Fece in 1980 their first general policy in the field of health protection — European Strategy for Health Achievements for Everybody.

What means "Health for Everybody"? Health for everybody is not only a simple object, but a process leading to gradual improvement of the health of all individuals. This express the general aim of WHO — "ensuring the population with the highest level of health". And this means that people in all countries in the world, must reach such a health level, which allow them productive work and active participation in the social life of the society to which they belong.

In fact this means that a much progressive approach must be used to attain health, prevention of diseases and decrease of the level of working disability. This also means that activity must be undertaken immediately.

As a result of this decision and the following after it measures, at the Alma-Ata conference on primary medical sanitary aid in 1978 a document for this policy was elaborated — "European Regional

Strategy for Attainment of Health for All about 2000 year", which represents by itself a part of the universal strategy. It is of huge importance for the health and welfare of the citizens of the European countries (and not only of the European) in the near years.

The strategy consists of three fundamental program trends: help to approbate the healthy mode of life, diminution of the unfavourable influence of life conditions and ensurance of appropriate, accessible and admissible medical care for all.

The regional strategy Health for AA requires fundamental pre-orientation of the national plans of health protection development and determines four major spheres of activity: mode of life and health; risk factors affecting the health and environment; preorientation of the system of health protection itself; and, finally, ensurance of political, administrative, technological, manpower, investigative and other means, necessary for achievement of the desired changes in these four spheres. Fundamental changes in the policy of health protection are necessary in the countries, the strategy incites that a considerably high priority ought to be given to health improvement and prevention of diseases; that not only the institutions of health protection, but also all closely connected with them sectors must undertake positive efforts for improvement and maintenance of health; that strong emphasis must be laid upon the role that may play the individual, the family and the society in health improvement; and, finally, that primary medical aid must be the chief tool for achievement of all these changes.

The strategy also requires the formulation of new regional tasks, directed at the achievement of the general aims. The necessary document, containing the complex of tasks, has been formulated and after being detailly discussed was accepted by the Regional Committee in September 1984.

In the document 38 concrete tasks are formulated, helping the realization of the Regional Strategy of Health for All. It is directed to the following aims:

- determination of the necessary improvement:
- determination of the spheres of activity, as well as directions and volume of the mutual measures;
- ensurance of appraisal of the achieved progress by means of a system of particular indices.

The comparative significance of 38 concrete tasks is different in the various countries. It derives from them that every country and region as a whole must choose their way in conformity with the local conditions. Among the general tasks there are tasks directed at health improvement, tasks related to concrete measures and tasks directed at the political support of the general strategy formulation.

The formulation of the regional tasks represents one more very important step on the way determined for the adoption of the strategy Health for All in the year 2000.

Six major topics are considered in the document:

General premises of health: Here are taken into consideration fundamental conditions, without which people could not be healthy, other social and economic aims could not be achieved, and society could not develop. Of first importance among them is the absence of war danger. Consequences for the health even in case of "limited" nuclear war are terrible — millions of killed and severely wounded, to whom not any system of health protection in the region could ensure medical aid, as well as prolonged influence upon the environment of destructive character. Other fundamental premises of health are the absence of poverty, high social justice, appropriate nourishment, education, pure water and sanitation, urbanized habitations and right to work and they play an important role in society.

Health — is more than absence of diseases. Despite that there is requirement for medical aid, the principal attention must be drawn to prevention of diseases, raising of health level and its recovery.

The mode of life exerts a strong influence upon health conditions. It becomes more and more evident that the mode of life, which most people are conducting, frequently appears as the basic cause of bad health, while the rightly chosen mode of life to a considerable extent might help health improvement.

Decrease of injustice in the distribution of medical attendance. The meaning of Health for All consists in the decrease of the irregularity in the ensurance of medical aid. Particular stress is laid upon the necessity for diminution of the injustice in the system of health protection between the countries and between the geographical, ethnical and social groups within the country. There exists a difference almost of 20 years in the expected duration of life between two countries in the region, holding extreme positions. The difference between the indices of mortality in infancy is exclusively high, as the lower level is 7 and the higher — more than 100 for 1000 newborns.

Preorientation of the services of health protection. In addition to the preorientation of the whole system of health protection to prophylaxis and health improvement, priority for prevention must be afforded to the institutions giving first medical aid as the main part of medical care at all levels of all-embracing system of health protection.

In the struggle for better health system the first medical-sanitary aid, based of the principles of Alma-Ata declaration strengthens the participation of the society and intersectorial collaboration, which would play a key role. The solution of the tasks of primary medical aid is determined by the achievement of much justice in health protection within the countries, raise of health level and prevention of

diseases and ensurance of accessible curative-diagnostic and restitutive medical care.

Together with the considerable progress in the struggle with the disease deployment, the interpretation and use of new medical technology has also led to some unfavourable consequences, related to the wrong or excessive use of this technology and, as a result, to increased cost of medical attendance. Therefore, regional tasks must be the systematic evaluation of the new and existing technology not only from the point of view of their productivity and effectivity, but also of their safety, acceptability and benefit.

Coordination of the work of all participating sectors. The health protection services could solve only a part of the outlined tasks and for this reason the intersectorial collaboration — the sole way, ensuring in fact the premises for high health level, capable of realization the policy of health and decrease of the risk of the negative physical, economic and social effects of environment.

The necessity of healthy environment assigns tasks related to the inhabited points, work conditions, polluted waters, polluted air, scarce population, irradiation protection, chemical safety of environment, safety of food, prophylaxis and decrease of the number of accidents and biological factors of the environment. As far as achievement of substantial neutralization of noxious influence of these factors require much profound information and activity of the trade unions, the political activists, health specialists and society as a whole must also assign tasks in these fields.

The health problems extend beyond the national frontiers. The polluted environment and the trade with harmful for the health products — obvious examples of problems, the solution of which requires international collaboration.

The realization of these tasks requires the development of political, administrative and information basis. It requires also considerable preorientation in the education and preparation of the health personnel.

The regional aims for Health for All clearly determine the minimum of measures, which have to be carried out in the European countries for raise of health level and solution of the interrelated problems about 2000 year. For making possible the systematic management and appraisal of the progress in every country and in the region as a whole, a complex of regional indices Health for All has been elaborated. It must be used in every country in their reports to WHO on the achievement of progress. Moreover, a regional plan for achievement health for all has been elaborated, pointing out the principal steps, which must be undertaken by all countries of WHO in this direction in the forthcoming years.

COMPLEX MEDICAL AND HEALTH RESEARCH PROGRAMS IN COMECON MEMBER COUNTRIES

S. A. Syagaev (COMECON)

The Council of Mutual Economic Assistance, by organizing and implementing multifaceted economic and scientific-technological collaboration between its member-countries, significantly contributes to the realization of a policy aimed at further developing the economy, raising the standard of life and well-being, as well as improving the health status of peoples in COMECON member-countries.

The Standing Commission on Collaboration in the Area of Health, set up by COMECON in 1975, has been instrumental in expanding and diversifying collaborative efforts in science and technology as they relate to major health problems, economic issues included. The rationale of such collaboration, designed to improve health care organization and promote population health, lies in a shared interest to further development in particular health areas of importance to all member countries.

Scientific-technological collaboration proceeds on the basis of five-year plans developed by problems. The 1986–1990 plan of scientific-technological collaboration between COMECON member-countries in the area of medical science, technology and health care includes programs addressing 15 problems: population health state and health care organization in COMECON member-countries; cardiovascular diseases; malignant neoplasms; maternal and child health protection; organ and tissue grafting and questions of transplantation immunology; laboratory diagnosis; infectious diseases; influenza; occupational health and medicine; environmental health; devising biomedical instruments and apparatus; for research and clinical medicine needs; drug testing; biotechnology in medicine; endocrine disorders; hygiene of nutrition.

Implementation of the research programs devoted to these problems involves the participation of over 500 collaborating research and medical establishments in COMECON member-countries. Coordination of collaborative efforts by problems and topics is entrusted to leading national research establishments of member-countries in the corresponding fields of medical science and health care; they function as coordinating centers or head organizations for program implementation.

Specialists from member-countries participating in development of a particular problem within a program meet every 1–2 years to draw conclusions from the experience gained and outline objectives for further work on program implementation.

For major health care problem, collaboration is effected under signed agreements and contracts.

Putting to practical use the results of collaborative efforts is a matter of particular concern to the Commission. Thus, over 1984 alone, the Commission has recommended for adoption by health services or collaborating establishments the results from completed research work on 48 program targets. Many joint investigation results obtained by scientists from member-countries, as well as COMECON methodological recommendations and standards based on them, are issued in the form of compilations and made available to all COMECON member-countries.

In 1984, updated nomenclature lists were prepared for essential drugs, immunological products, and medical engineering articles, and estimates indicated of their needs by COMECON member-countries till the year 2000. Based on these lists, relevant COMECON bodies (Committee on Machinery Construction, Commission on Collaboration in the Area of Chemical Industry, etc.) organize within a framework of specialization and cooperation, the production of medical equipment and drugs, while foreign trade agencies provide for mutual deliveries of annual production.

Under a contract for specialization and cooperation in the manufacture of immunobiological products, specialized production items are distributed in full amounts as foreseen by mutual agreement.

In addition, collaboration included the setting-up of an international medico-technological information system, "Medinform", as an integral part of the international scientific-technological information system of COMECON member-countries. The former is designed to provide interested users from member-countries with scientific information on recent developments in the area of medical science and health care. As a result of coordinated efforts by the countries participating in the system, steps were undertaken to reinforce information services, strengthen their staffing, improve access to stores of participating countries and to global stores of primary and secondary documents. An automated functional subsystem, "Medic", for exchange of bibliographic information recorded on magnetic tape has been launched.

On bilateral or multilateral basis, COMECON member-countries undertake actions to accelerate health development in S.R. Vietnam, R. Cuba and Mongolian P.R. These actions are mostly aimed at providing support for improvement in national medical manpower training, development of health facilities, and control of prevailing diseases in these countries. COMECON member-countries join efforts in conducting surveys on a number of tropical and infectious diseases in S.R. Vietnam and R. Cuba, investigations on substances of natural origin and their use as medicines in these two countries.

In 1984, interested COMECON member-countries set up a task force for developing the methodology of malaria control in areas where chemical-resistant causative agents and vectors are prevalent.

COMECON collaborates in the field of health with WHO, including the WHO Regional Office for Europe, and UNEP, in the form of information exchange, preparation of joint publications, mutual invitations and participation in meetings, convening joint conferences on current international health problems.

Under the sponsorship of COMECON, WHO and UNEP, a seminar for specialists from developing countries and COMECON member-countries concerning international use of documents on chemical safety was successfully held in Moscow in 1984.

COMECON activities in the area of medical science and practice will continue to encourage population health improvement in countries of the socialist community, and, therefore, to beneficially influence health development of the global scale.

TASKS ON THE PREPARATION OF PHYSICIAN PERSONNEL IN THE ASPECT OF THE GLOBAL AIM OF HEALTH FOR ALL

T. Fülöp (WHO)

Among the problems, elaborated within the frame of the programs for preparation of the health manpower, particular attention is drawn on the problems, concerned with the improvement of the qualitative indices of this process. In their elaboration of fundamental significance is the concept for integral preparation of the manpower and development of health services. As it is known, this concept is based on the fact, that the quantity and quality of the personnel must be planned in full conformity with the specific requirements of public health and with the needs of the population. The logics and justification of this approach are evident, but nevertheless they do not help its unobstructed introduction into practice. There are countries in which this concept has not received the necessary acknowledgement.

Under this point of view, the concept represents an important, in particular, question for the role of the physician personnel in connection with the perspectives of development of health care and achievement of the global strategy of health for all. The final meeting of this term is more differently interpreted in the countries, which is determined by the different conditions and possibilities. Nevertheless, all know that medical workers and physicians included, from the standpoint of the assumed tasks must specially be motivated that they must work where they are most needed. And for this reason their preparation must pursue not so much the traditional objective of obtaining the necessary level of professional knowledge, skill and respective attitude to the work, but, which is not less important, to be stimulated to en-

gage into practical work. If we briefly evaluate what the graduates from the medical schools must be able at graduation to perform so as to ensure health for all, in this list must be included the following:

- quick reactions to the needs of health care and the requirements of society;
- work in close contact with the community in view of stimulating the healthy mode of life and the elaboration of self-aid habits;
- execution of active work on sanitary enlightenment among the population;
- to be oriented themselves and to direct the efforts of the community to more intense development of the measures for prevention of diseases;
- active work in the composition of the team of medical workers and, if necessary, to assume the management of this team;
- constant perfection of his own professional competence.

For ensurance of such a level of education of the medical workers, physicians included too, it is necessary that this training is conducted not only in clinics, but also under conditions, where primary medical care is given. It must be directed to the needs of the community and build up in view of orientation to prevention. The latter means not so much ability for early detection of diseases, but skill to preserve the health of the healthy people.

It must be noted that in the preparation of the medical personnel for the achievement of health for all, it is necessary that this training, directed to the elaboration of the necessary professional competence, must be at the same time: directed to social problems; based on social-hygienic approach; complex (multiprofessional); integrated on the basis of the main problems; directed to elaboration in the students of ability to self-education, based on the achievements of science and adapted to local conditions and available resources.

In this consists the future orientation of the medical education and even from now in a number of countries medical schools are functioning, which have reorganized their work in conformity with the above-stated principles. The further extension of this practice represents one of the tasks, presently solved by WHO.

CONTEMPORARY PROBLEMS OF HEALTH DEVELOPMENT

F. E. Vartanyan (USSR)

Throughout the world, the state and problems of health care are increasingly drawing the attention of governments, international orga-

nizations, international and national research centers, and, of course, remain a major concern of the community in countries, regions, and the whole world.

This interest stems from the fact that nowadays health development mirrors the social, economic, and political spheres of human activity. Positive health development contributes to socioeconomic progress of the community, and it is for this reason that health care has been accepted as an integral part of development policy and reflects the socioeconomic goals of governments and peoples.

All contemporary global problems are more or less interconnected, and it is recognized that a definite link exists between socioeconomic factors and the level of health. V.I. Lenin wrote about the "unity and connectedness, interdependency and integrity of the universal process".* The validity of this proposition was verified by years of experience in socialist countries, where considerable progress was achieved in population health protection. But, whatever the attainments of health care system in socialist countries, they are in no position to substantially alter, for conceivable reasons, the state of health in the world which continues to be well below the level that could be hoped for. This situation partly results from some 1000 million people in developing countries living under heavy socioeconomic conditions. According to UN data for African countries, there has been since 1980 an average 4.1 percent annual drop in revenue per one resident. The foreign debt incurred by developing countries to West banks and corporations exceeds, as of 1984, a total of 800 000 million dollars. Cuts of allocations for social needs, unemployment and inflation, decline in the standard of life, all this cannot but produce a negative impact on the health state of the population.

These impediments could hardly be expected to be overcome in the near future, for a number of known reasons. And this is why prospects for global population health state cannot be viewed in an optimistic light. Nevertheless, the WHO statute provision that "Governments carry responsibility for the health of their peoples, and this responsibility calls for undertaking appropriate steps of a social nature in the area of health" assumes new significance under the conditions of social and political change taking place in the world.

One-third of the world population residing in developing countries is known to live in socioeconomically destitute regions of the world. It is this part of the global population that, by virtue of its demographic importance, determines population health in the world. Furthermore, morbidity in developing countries is characterized by presence of both infectious and noninfectious diseases, so that a pe-

*V.I. Lenin, Compl. Coll. Works, vol. 29, p. 135.

culiar "mixed pathology" pattern ensues that gives rise to difficulties in organizing primary and secondary prevention.

The broad spectrum of disease types prevailing among the population raises problems in organizing inpatient and outpatient care as well as in questions relating to manpower training, drug procurement, etc. This situation, along with problems associated with the existing socioeconomic circumstances, frustrates efforts at creating conditions that would further progress in the health area. In developing countries, 42 percent of death are attributed to infectious and tropical pathology, which means that 13 million people die each year from these groups of diseases alone and, moreover, at ages below 40. Four million children succumb each year before attaining 5 years, and another 4 million are incapacitated. The cause lies in six known childhood infections. And these are avoidable by means of well-known preventive methods that have proved their value over decades of practice.

In all African countries, child mortality has been observed to decline over a 20-year period (1960–1981). Even today, however, the level of this indicator remain too high, exceeding 200 in some of the countries. Assuming that progress on this point continues at a similar pace for another 20 years, then by year 2000 the situation with this dominant indicator of population health in the region, and in developing countries in general, would still be expected to remain definitely unfavourable.

Health problems in developing countries are understandably quite different from those in developed countries — with respect to morbidity, the manpower situation, technologic availability, etc. This does not testify, however, that health problems are more readily solved. Noninfectious diseases, such as cardiovascular, oncologic, psychoneurologic disorders, are multifactorial in nature, and the contemporary approaches to prevention of this group of diseases fail to achieve the desired effect; this is shown by the fact that about 70 percent of deaths in developed countries are referable to cardiovascular and oncologic diseases. When traumatism and environmental problems are added, we can form an idea of the impressive amount of tasks to be accomplished before further health development can be ensured.

It is becoming increasingly evident in recent years that true progress in the health area depends in no small extent on achievements in biomedical science. It is progress on these lines that should allow to formulate scientifically sound approaches to primary and secondary prevention of major chronic noninfectious diseases.

A certain positive impact of health development may be expected from upgrading the professional level of medical workers, that is, from a manpower policy providing for indicators of quality, not quantity. Contemporary biomedical research is high-cost and calls for a large

number of highly qualified specialists. There is no question that developing countries, too, should undertake biomedical research, if they are to gain self-reliance in medical science, to avoid scientific neocolonialism. Again, the success of such endeavours will largely depend on a favourable socioeconomic situation. Therefore, population health problems in the world, developed and developing countries included, are determined to a considerable extent by problems of socioeconomic nature.

Analysis of the state of affairs provides compelling evidence that true success in health development on a global scale presupposes a political situation ensuring maintenance of peace in the world.

**THEORETICAL AND METHODOLOGICAL
ISSUES IN HEALTH CARE**

PREVENTION ISSUES OF POPULATION HEALTH PROTECTION IN THE SOVIET UNION

V. I. Kant (USSR).

Soviet health care, from its first steps to its present level of development, has been characterized by the leading part assigned to preventive orientation of activities in all types of medical establishments in the USSR.

A socialist State conceives prevention as a system of socioeconomic, including health, measures aimed at promoting and maintaining the health of its citizens, at eliminating the causes that generate disease. The objectives of this State function are implemented through an extensive developed country-wide system for public health protection (network of curative-preventive and sanitary-epidemiological establishments, adequately staffed and equipped; solution of environmental protection problems by relevant organizations and local Soviet authorities; formation of a healthy life style for people of all ages; etc.).

In our country, the activities of physicians employed at curative-preventive establishments typically embody the preventive orientation of Soviet health care in the form of a method that has proved its value over a more than 60-year period of experience, namely, the dispensary method; apart from detection of new cases of illness, it provides, on a planned basis, for follow-up surveillance of dispenserized subjects, delivery of curative-rehabilitative care and taking sanitation measures.

At the present stage of Soviet health development, a transition is in progress from dispensary surveillance of particular population segments to country-wide dispensary coverage of the whole population.

In view of the prevention tasks being currently executed, the contents of the dispenserization concept may be formulated as follows: Dispenserization is a process of active dynamic health monitoring of the whole population by means of annual examinations, with distribution by medical priorities as regards sequence, volume and complexity of diagnostic procedures; active detection of any possible deviation from the physiologically normal, premorbid features, and earliest forms of illness, with subsequent treatment; study and elimination — with support from local authorities and community organizations as well as enterprise (establishment) administrations — of causes generating disease; extensive coverage of the population with health education and curative-restorative measures aimed at improving and maintaining health, reducing morbidity, furthering working ability and occupational activity, ensuring active creative longevity.

In concrete realization of this expanded dispenserization program, a certain part is assigned to the following points:

- introduction of correctives in polyclinic technology, design, construction and modernization;

- adoption of automation tools to build up health data banks for the population as a whole and for particular population segments;

- revision, towards intensification and professionalism upgrading, of the functions of first-contact physicians, specialists, intermediate-level medical personnel, and paramedical personnel;

- accomplishment of the transition from health education for particular segments of the population to formation of a healthy life style for every citizen of the country;

- shift of methodological approaches in studying social health problems and medical care needs of the population from high-cost complex medical examinations of population samples, conducted especially for the purpose, to retrieval of pertinent information, more complete and dynamic, from territorial and establishment data banks;

- search for integral indicators usable for assessing population health in positive terms (working ability, occupational activity, dynamics of health promotion in populations and segments, health indexes, etc.); such indicators should prove as essential addition to conventional "negative" indicators (crude mortality, morbidity, invalidity rates).

Consequently, as rightly stated by USSR Health Ministry authorities, coverage of the population with dispensary services under contemporary conditions is a strategy that revolutionizes the whole system of Soviet health care.

In technical terms, the questions of theory and strategy of socialist health care founded on prevention have been developed in a document drafted jointly by COMECON member-countries, "Major directions and perspectives for further improvement of socialist health care", adopted by a conference of health ministers from socialist countries in June 1976 and based on prevention principles. The past decade since this document appeared has shown its significance, necessity and coordinating role.

FACTORS INFLUENCING THE HEALTH CONDITIONS OF THE POPULATION AND MODE OF LIFE

M. Visotzky (PPR)

Progress in medicine and improvement of life conditions which occurred in the last decades, led to considerable prolongation of man's life and changes in the order of the major causes of death. Out of the

first places in this list disappeared tuberculosis and other infectious diseases, which are in state to prevent with not too many exceptions.

At present, major causes of death in Poland and in many other countries are the cardio-vascular diseases, the malignant neoplasms and the accidents, poisonings and traumas. Three above-mentioned groups of diseases in 1984 in Poland were cases for more than 75 percent of all fatal cases. In 1975 the percentage represented 69.4 percent. Its increase was due to a real increase in the incidence of these diseases and improvement of the qualities of diagnostics.

The cardio-vascular diseases, malignant neoplasms and traumas, poisoning and accidents determine also to a considerable extent the increased mortality in males, the mean life of whom in Poland is with 8 year shorter than that of females.

There is also a group of diseases with great social significance, which rarely appear in the indices of the statistics of mortality, but represent frequent cause of invalidation, working disability and hospital admission. To these diseases must be referred the chronic non-specific diseases of the respiratory system, the non-traumatic diseases of the locomotor system, as well as the physic diseases.

From the epidemiologic studies, carried out in our country, it becomes evident that 15 percent of the adult males and 5 percent of the females suffer from chronic bronchitis, while the incidence of the chronic arcticular diseases is equal to 10 percent in males and 25 percent in females in the age group of 30 to 60 years. One of the causes of the magnitude of psychiatric pathology is the increased incidence of alcoholic excess.

In the present work are also represented the demographic tendencies, the problems of the influence of alcoholic consumption, the propagation of smoking, the structure of nutrition and the physical activity of the population in Poland, as well as the influence of these factors on health conditions of the population in our country.

Presentation is also made of these features, which help the healthy mode of life and the principal significance of its popularization in the strategy of the World Health Organization "Health for all up to the year 2000".

THE NEW ECONOMIC APPROACH AND COUNTER-PLANNING IN PUBLIC HEALTH

M. Milev, L. Kochev (PRB)

The perfection of planned administration in public health is usually associated with difficulties, taking into consideration the particulari-

ties of the health organization as a system:

- firstly, this is a very dynamic system of social type, in which the objects and subjects of the administrative (planned) effect is always man;

- secondly, its objectives and tasks often surpass the departmental frame, owing to which it could be difficultly separated from other communal systems;

- thirdly, the complexity and abundance of internal and external connections, as well as the versatile dependence of health as biosocial phenomenon determines the probable character of the system, i.e. the results and behaviour of the system after administrative exertion of effect could not be exactly foreseen, but to some extent approximately.

With regard to these tasks and measures in planning of public health on district or local levels the formulation is often much general, without precise quantitative characteristics: improve, increase, etc., the account of which is ordered in such manners as: increased, improved, etc.

Fulfilling the decisions of the 12th Congress of the Bulgarian Communist Party and specially the decree of the Cabinet of Ministers of PRB of January 1, 1981, the Ministry of Public Health began experimentally to introduce the new economic approach and its mechanism in the health administration of two districts.

The main point of the experiment consisted in this, that in front of the district health organizations and their subdivisions were put concrete state tasks, representing by themselves control numbers and indices for utilization of the material-technical and manpower resources, indices for the volume of health activity and the expected medical-communal effect.

The financing of the organizations and their subdivisions proved to be in dependence of the fulfillment of these indices. The work salary was formed as a resultive quantity — difference between income and expences, plus the additional material stimuli for the over-fulfillment of the quantitative and qualitative indices. The mentioned approach created in the working teams a tendency to securing the over-fulfillment of the assumed tasks and indices, corresponding to the finances and to the individual (plain) work salaries.

By difference from the traditional normative planning, the counter-planning is based on the deployed overnormative possibilities and reserves of the system, the realization of which ensures very high quantitative and qualitative results or economies of material and financial means. Usually such possibilities and reserves are designed by the working teams, having the possibility to adopt and approve the counter-plan.

The practice from the early period of the experiment revealed these "narrow places". In a number of cases the counter-indices were assumed by the teams with great enthusiasm, not corresponding to the real possibilities and requirements of the population.

The correction of the terms and indices or cancelling of the planned measures led to economic sanctions from the part of the bank organs, financing the organization or from other control organs.

These phenomena conducted to the elaboration of the technology of counter-planning, which ensured the adoption of real indices, related to maximal possibilities of the manpower and the material-technical potential and financial resources corresponding to the district health organization and its subdivisions (Fig. 1).

The active participation of the working teams and the revelation of additional reserves for over-fulfillment of the plan suppose the observation of a definite consecutiveness of the stages and operation of its formation, known as the rule of "higher than below, and lower than the top", which is shown on Fig. 2.

In the structure of the model of counter-plan, elaborated according to the described technology, are confined four parts. The model includes all state and counter-indices of health activity, utilization of the material resources and manpower, financial ensurance, medical-communal effectivity, communal development of the teams and youth activity. The new consists in the fact that all parts of the plan are presented under the form of tables, containing the concrete quantitative indices, apt to exact measurement, comparison and evaluation.

After the successful experiment in 1984, the technology of counter-planning was recommended to all health organizations in the country, which use the new economic approach and its mechanism in the activity of health administration.

TECHNOLOGICAL SCHEME
put in conformity with the state plan tasks, resources
and elaboration of the counter-plan tasks

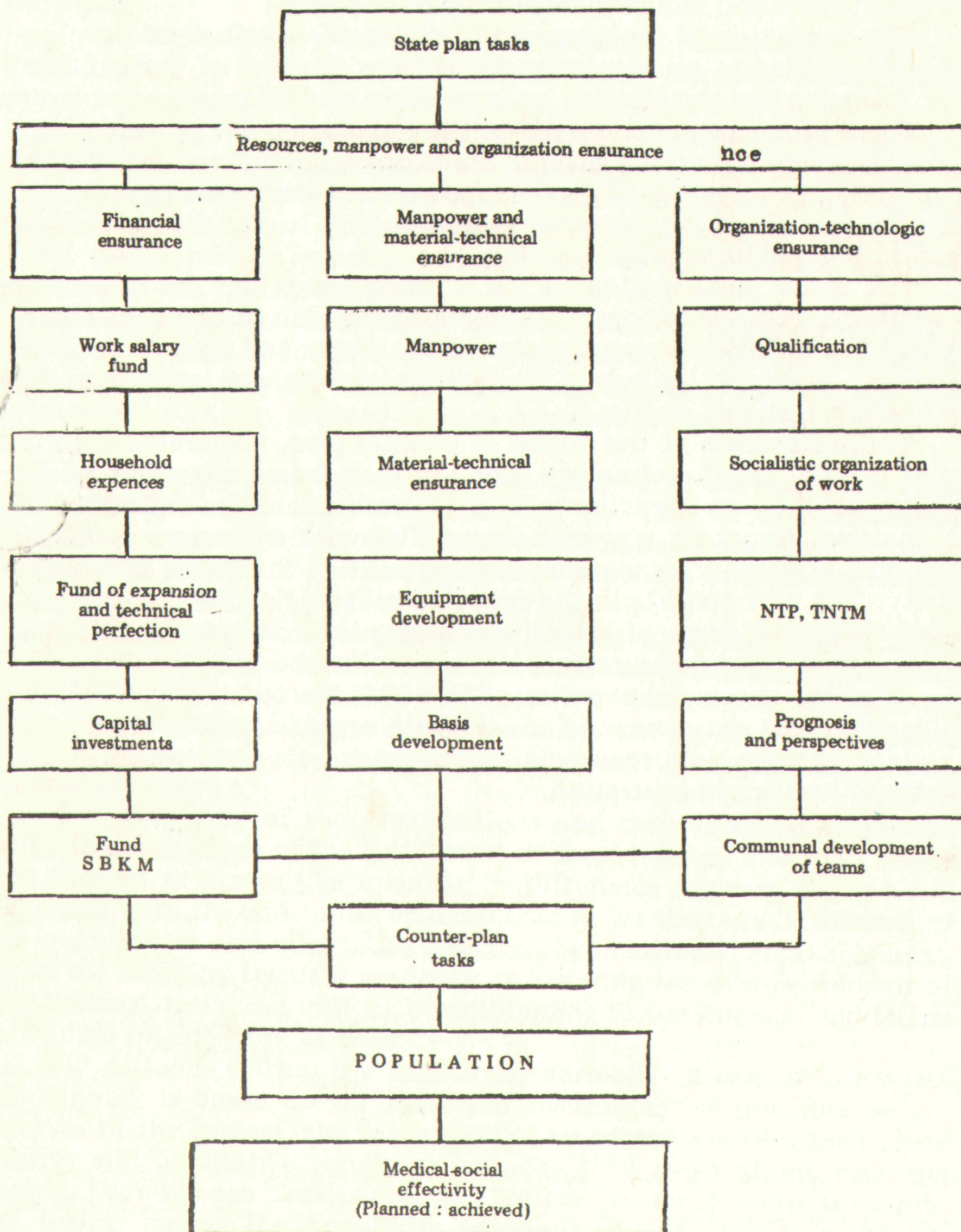
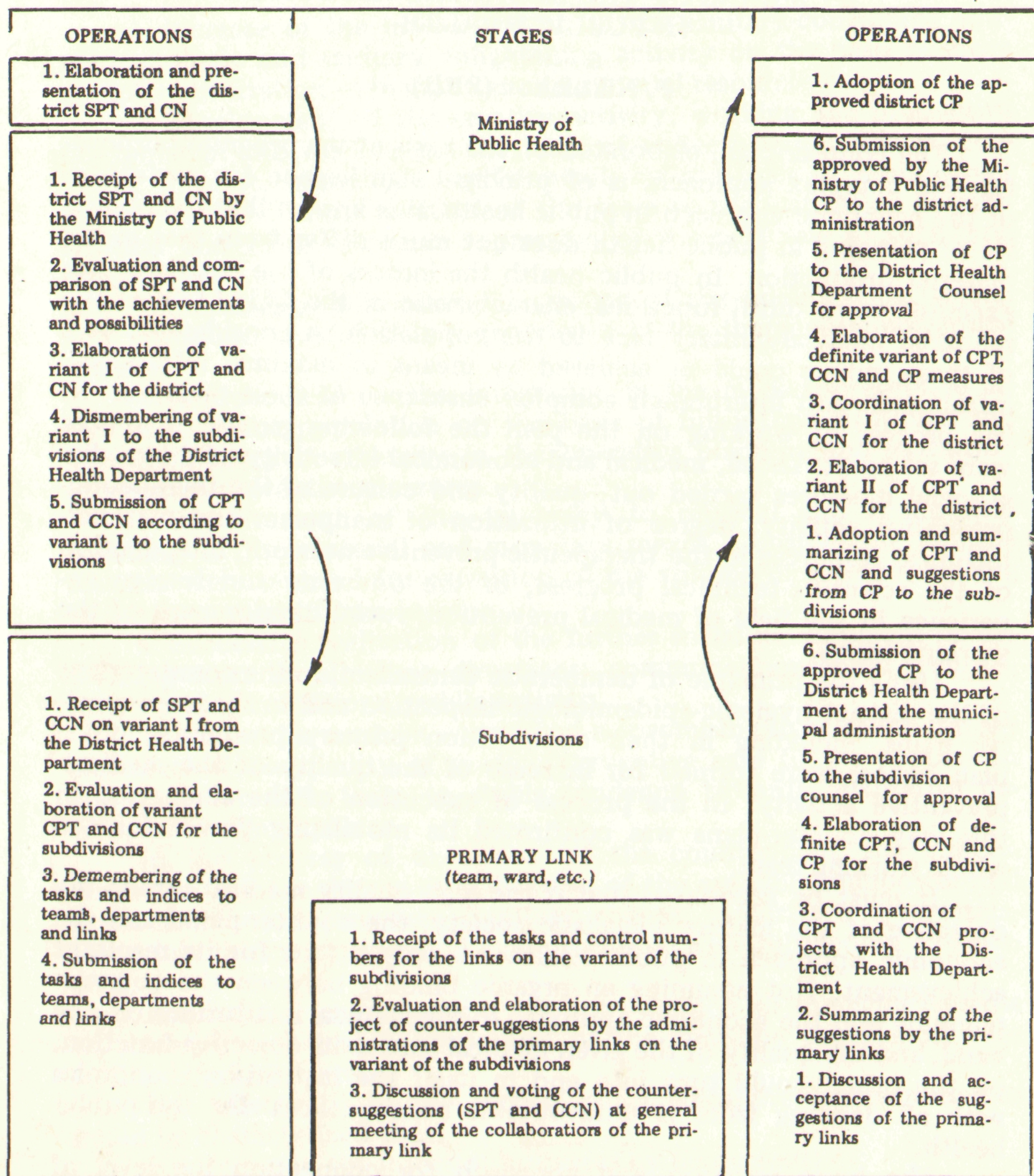


Fig. 1

**Consecutiveness (algorithm) of the stages and operations
in elaboration of the counter-plan of the District Health
organization (DPHSS) and their subdivisions**



SPT and CN — state plan tasks and control numbers
CPT, CCN and CP — counter-plan tasks and control numbers, counter-plan

Fig. 2

WAYS OF ACHIEVEMENT OF HIGH QUALITY OF MEDICAL CARE FOR THE POPULATION BY MEANS OF THE ECONOMIC APPROACH IN PUBLIC HEALTH

P. Nikolakov (PRB)

The counter-plan, elaborated on the basis of the program-purposeful and complex approach, is of principal significance for perfection of the economic approach in public health. It is known that the objective of planning in public health does not much differ from that in the material production. In public health the indices of the results of the executed work fulfill functions, characteristic of the QUALITY of the rendered medical-sanitary care to the population. A considerable part of these indices could be achieved by means of maximal intraoffice, intrabranh and interbranch complex ensurance of these measures. In the process of working on the plan the following groups of indices were set apart: social, medical and economical effectivity of the medical-social measures carried out; quality and culture of the therapeutic-preventive activity; degree of utilization of manpower and material-technical resources in the therapeutic-preventive network; introduction of the scientific-technical progress, of the domestic and foreign experience in the field of medical prevention; social development of the working teams.

Using the principle of democratic centralism, in the counter-plans of the district hygienic-epidemiologic inspection and in the team creative plans, including in their composition primary productive links, plan indices were formed for increase of the quality of the medical-preventive activity. In the process of execution of the elaborated in this way counter-plans was confirmed its mobilizing power for the whole working team.

It must be accounted that if the high quality medical care is the objective of the mature socialistic society, the counter-pland and the economic approach in public health are only means for its resultant achievement. Not assuming an organic binding between the counter-planning and the economic approach in the medical institutions on one hand, and the quality of the given medical care as its objective function, on the other, could turn into end in itself the institution economics with all deriving from it unfavourable consequences for the public health.

The basic criterion and approach for connection the level of salaries, counter- and team creative plans, must be considered the "quality of the performed work". In favour of correctness of the selected directions speak the result of the two-year experiment on the ful-

fillment of the economic approach in the hygienic-epidemiologic inspection of the city of Pazardjik, which in general lines are the following:

1. Increase of the intensification of the sanitary-controlling anti-epidemiologic and sanitary enlightening activity on the basis of more complete utilization of manpower and material resources.

2. Development of the creative activity, working and productive discipline of the workers on the basis of collective and personal economic interest, mutual and self-control; on the basis of more direct participation of every member of the team in the institution administration and more extensive expression of the principle of socialistic democracy.

3. Increase of the interest in raising of the qualification, search and introduction of first-line experience in the therapeutic-preventive activity.

4. Improvement of the integration in the medical-preventive attendance of the population on the basis of full intrainstitutional and intradisciplinary complexity in the operative planning and execution of versatile preventive measures.

5. Improvement of the tendency to rational and economical spending of the material and monetary means. Considerable internal reserves were revealed for extension of the volume of activity, leading to the formation of own income.

6. Successful realization of the further social development of the working team in all these directions: communal-household security, rest, working conditions, public activity.

These results must be considered as promising signs of the further elevation of the quality of medical-preventive care to the population and together with them to stable tendency towards qualitative development of manpower.

In the process of execution of the counter-plan, the indices, characterizing the degree of utilization of the available manpower and material-technical resources (sanitary checks, inquiries and investigations, laboratory analyses and measurements) were fulfilled by 124 per cent.

The indices, characterizing the introduction of the achievements of scientific-technical progress and of the first-line experience were fulfilled by 132 percent.

The effectivity of the carried out medical-preventive measures could be characterized thus:

- decrease of the infectious diseases by 55 percent;
- increase of the part of the state enterprises, put in conformity with the sanitary requirements — by 7 percent;
- reduction of the expences for the management of the institu-

tions — by 6 percent;

— increase of the plain income from additional services to other organizations — by 20 percent;

— increase of the mean work salary of the employees in the hygienic-epidemiological inspection — by 12 percent;

The two-year experiment on the introduction of counter-planning and economic mechanism in the epidemiologic inspection of the city of Pazardjik revealed that this approach to planned administration and socialistic organization of the work is one of the levers for improvement of the quality of the whole activity on the medical-preventive care to the population.

CURRENT OBJECTIVES AND PROSPECTS IN PLANNING FOR THE SOCIALIST HEALTH SYSTEM

I. V. Pustovoj (USSR)

Viewed in a historical perspective the socialist health system appears at present as a political and socioeconomic strategy governing the unity of principles and actions in the area of health maintenance and improvement at the national level and, between socialist countries, in relations on health matters at the international level.

The cornerstone of the socialist health system, shared by all socialist countries, consists in the communal mode of production and distribution of national assets, and the strategy of Party and Government guidance in maintaining and promoting the principal asset of society — people's health.

The fact that socialist countries were able to achieve remarkable progress in protecting population health is largely traceable to one of the cardinal principles applied in socialist health care, namely, planning on a countrywide scale.

A constant must in socioeconomic development in socialist countries is to bring into harmony the existing forms and methods of sector-specific planning with the current objectives of national economy; the health sector is no exception, and this marks a qualitative new stage in population health protection.

As regards further improvement of health planning in conceptual terms, particular emphasis is placed today on development of methodological and technical problems in forecasting.

The broad lines of inquiry aimed at upgrading the value of forecasting for socialist health development include:

— developing the theoretical and practical aspects of interconnections between health planning and forecasting;

- forecasting for health care and for biomedical science;
- further improvement in theoretical and practical fundamentals of territorial planning and program planning by objectives;
- defining the extent to which the socialist health system influences health development in individual countries and at the international level.

Health forecasting must become an integral part of the planning cycle, being assigned a leading role in it. Furthermore, it is a question of principle in forecasting for a socialist health system to develop a tree of objectives, with special consideration of such factors as: health implications of national socioeconomic programs currently in operation; influence of health care upon development of national economy; influence of scientific-technological progress upon integration and specialization of medical care; influence upon health care in other countries; defining the guaranteed and needed levels of population health; rational utilization of overall facility and manpower resources; formation to a healthy life style; governmental and personal responsibility for health maintenance and so on.

In order to cope with this series of complicated problems, it is necessary to join the capabilities of social health workers from socialist countries in the form of a forecasting research center operating within the framework of the COMECON health commission. A high-priority objective for improvement of planning in the socialist health system is to improve linkage between territorial health planning at the national level and programming by objectives within the socialist health system.

With this in view, it is necessary in the first place to study the unique experience of scientists from socialist countries participating in COMECON health activities, and determine the extent of its practical influence on health improvement in individual countries and at the international level.

By optimizing these links, it will doubtless be possible to expand opportunities for joint utilization of facility and manpower resources in the interest of the whole system of socialist health care and thus promote its influence at the international level.

Planning experience accumulated in a number of republics of the Soviet Union by integrated establishments with teaching-research-service functions could serve as a schematic model for improvement of linkage between territorial planning and problem-targeted planning.

Promotion of planning for the socialist health system calls for a scientifically sound analysis of health development at the international level and realization of coordinated activities between socialist countries..

CONTENT AND NOTIONS IN THE THERAPEUTIC-PREVENTIVE CARE

M. Pradl (CSSR)

For the characteristics of the therapeutic-preventive care a whole number of notions are used, the meaning of which completely or partially coincides according to their significance and content: preventive examination, out-patient follow-up, treatment, rehabilitation, completion of treatment, etc. Rendering of therapeutic-preventive care must proceed from the distribution of the whole population into 5 groups:

1. **Group of healthy individuals.** These individuals have no deviations from the status of complete health. But this term itself remains obscure, i.e. we cannot measure and correspondingly express it. For evaluation of the health there are no precise criteria. By the way, this question has enormous medical, social and economic significance.

2. **Group of conditionally healthy individuals (preclinical patients).** Here are included individuals, who have one or another deviation from norm or symptomless disease.

3. **Group of acutely ill individuals.** Here are included individuals, suffering from some disease, which is considered as restriction from free life.

4. **Group of recovering individuals.** Individuals after acute disease, who come back to group healthy or their disease assumes a chronic course.

5. **Group of chronically ill individuals.** Here are included individuals with chronic pathology, who have temporary improvement and aggravation of their disease. They terminate their life due to it, or to some other cause, and sometimes could get rid of their disease and return to the group of healthy individuals.

Every man is during his whole life in one of these groups and temporary passes over from one group to another.

When discussing, it is very important to take into consideration the duration of time, for example: the transition from conditions of health to death proceeds for a minimal interval of time in traumas; or the disease, running during the whole life, gradually leads to death. It is also necessary to know that man could be affected by several diseases in various stages and then the chronic patient could die from trauma or other sudden diseases.

Treatment. — could be considered as exertion of an effect in view of sending back the patient to group 1 or maintaining him into transition to group 5 or to death.

Completion of treatment — decrease of the intensity of treatment before its discontinuation.

Rehabilitation — specific exertion of effect, mainly therapeutic, to individuals in group 4 in view of sending them back as early as possible to group 1.

Preventive examination — examination aimed at elucidation to which group the examined individual must be referred.

Out-patient follow-up — this is a method of work, process and not condition.

Out-patient follow-up after treatment — this is an active exertion of effect on the patient after detection in him of an acute disease and treatment aimed at sending him back to group 4 or maintaining him in the transition to group 5 or to death. This notion does not differ from the definition of treatment, but the out-patient follow-up, according to our point of view, must be very complex, differing from treatment, with respect to which we understand mainly medical measures. The out-patient follow-up must also include social and communal measures. If by treatment we expect a much active attitude of the patient, in the out-patient follow-up as a method, much active becomes the role of health protection. Therefore, out-patient follow-up after treatment represents exertion of effect on individuals in groups 3, 4 and 5.

Preventive (prophylactic) out-patient follow-up — this is an active exertion of effect on all individuals, who are in groups 2, 3, 4, 5, irrespectively what regimen they receive and cares from the health protection as system: after preventive examination or manifestation of acute disease. This method is needed in the well organized health services and necessitates considerable resources.

General — continuous out-patient follow-up — active exertion of effect on the whole population, irrespectively of its appurtenance to the group of healthy individuals. Here it is important to ensure possibility not rather for registration, but really actively and in complex way to influence all population groups so that to be possible more individuals to be continuously or to pass over as soon as possible to group 1 of healthy individuals. For this to the health protection are necessary solid manpower, material-technical and resource basis with utilization of communal resources from other branches, since the out-patient follow-up of the whole population represents a method of the socialistic health protection.

TROPICAL DISEASE PREVENTION: INTERNATIONAL AND NATIONAL ASPECTS

A. Ya. Lysenko (USSR)

Tropical diseases, especially the infectious and parasitic, are a serious health problem across the world. Where endemic areas exist,

these diseases are an important cause of high death rates, impaired health, and enormous absenteeism. Many tropical diseases take part in the vicious circle "disease — poverty — disease. . ." that still characterizes the majority of developing countries situated in the hot climatic zone. On the other hand, tropical diseases may occasionally be transferred to nonendemic territories of the moderate belt, giving rise to a constant threat of clinical and epidemiological consequences of such transfer occurring in developed countries. Tropical disease prevention on a global scale has thus to be considered as a program with two aspects: control (or eradication) in endemic territories, and epidemiologic surveillance over transfer to nonendemic territories.

Considerable experience has been accumulated to date with control and prevention of tropical diseases. Phenomenal success was achieved in the struggle against smallpox — in the course of the global WHO program this infection has been eradicated. In a number of cases success was partial (global yaws eradication program; regional program for eradication of urban yellow fever on the American continent, etc.). There have also been examples of disappointing results; failure of the program to eradicate malaria in the world; unsuccessful attempt to exterminate *Aedes aegypti*, the vector of yellow urban fever on the American continent, etc.

At present, a series of international and national programs are in operation, such as the WHO Expanded Immunization Program; the WHO/UNDP Tropical Diseases Program; the Onchocerciasis Control Program in the S. zone of Africa; the Dracunculosis Eradication Program in India; the Program for Preventing the Consequences of Tropical Disease Transfer to the USSR, etc.

Success of current and future tropical disease prevention programs is largely dependent on the ability of health organizers to profit from past and present experience in implementing national and international programs.

A retrospective analysis of operations in the course of a number of programs for eradication of infectious and parasitic diseases has allowed to formulate the determinants of success or failure (Farid, 1982; Yekutieli, 1980). In the framework of this session, it appears opportune to consider national tropical disease control or eradication programs in some aspects of their integration with: (1) national economic development plans; (2) national primary health care development plans; (3) international programs.

National economic development is not necessarily associated with decline in prevalence of tropical diseases (Ramalingaswami, 1981; Hanter et al., 1983).

Any development projects potentially favoring spread of tropical diseases must include ~~at~~ at the design stage and as an integral part of

the project — development of primary health care services with appropriate budget allocations.

National tropical disease control programs may be greatly spurred if timely integrated into international population health improvement programs (India and others) within the "International decade of drinking water supply and sanitation" adopted by the United Nations General Assembly for 1981—1990.

Under WHO sponsorship, many international programs are currently in operation to avoid transfer of tropical infections and parasitic diseases from one country to another and prevent consequences of such transfer from tropical to developed countries in the moderate zone. Major actions include global monitoring (for conventional diseases, malariologic situations, spread of chlorine-resistant *P. falciparum* strains, etc.) and development of national services for epidemiologic surveillance over transfer of tropical diseases (USSR, CSSR, PRB, and others).

As shown by USSR experience with preventing clinical and epidemiological consequences of imported tropical diseases (malaria, etc.), a determining role is played by effectiveness of primary health care services, whose performance is promoted on a regular basis by medical personnel training and health education of the public.

A token for effective prevention of tropical diseases is the integration of pertinent programs at all levels into programs for socioeconomic development, population health improvement, primary health care development, medical personnel training, and health education of the public. Nonintegrated programs may be expected to produce only temporary or partial results, their efficiency is unsatisfactory and cost/benefit ratio disadvantageous.

MEDICAL CARE QUALITY — FACTORS AND ESSENCE

L. Ivanov (PRB)

From a four-dimensions model point of view of the essence of medical care, the basic elements, properties and factors whose interaction forms the structure, functioning and progress of medical care, one may review the problem of quality in the following directions:

A. Three aspects may be distinguished in the essence of medical care:

1. Technical — it reflects the level of the application of medical sciences and technologies and of other sciences in the health problem-solving of a person.

2. Social-psychological — it reflects the level of interpersonal relations between the medical personnel and the patient.

3. Economic — it reflects the relative expenditures per unit of utility.

It should be pointed out that these aspects of medical care are mutually related and sometimes it is extremely difficult to be differentiated.

B. The quality definiteness of medical care mostly depends on its inner structure, the bonds nature of the elements as well as on the composition of these elements.

The latter may be determined as follows:

1. Technical elements — admission, case history, diagnosis, therapy, food, nursing cares, rehabilitation, dispensarization, registration, prevention, social services, medical care outcomes.

2. Social-psychological elements — medical etiquette, morals, culture, iatrogeny, attitude of the patient.

3. Economic elements — efficiency.

C. The properties of the elements have different degrees of expression and their number may vary in any concrete type of medical care. The quality of the concrete medical care is determined by the hierarchy of the properties in a specific system providing medical care with relative stability and independence in spite of its internal mobility.

After the properties of the concrete medical care have been identified, they should be of necessity translated into criteria and standards. The latter are supposed to be used for consistent quality evaluation.

D. The quality of the particular elements is conditioned by the following basic factors: subject, social relations, object, finances and material-technical base of medical care.

The quality related factors determine the access of the population to medical care and its utilization as well. When medical care is provided but its scope is insufficient to produce useful effects of the health and benefit of the patient, it is clear, that care is of low quality because of quantitative inadequacies.

The highly sophisticated system of the elements and properties (liaisons and relations among them) and the factors determining the quality of medical care, predetermines the necessity of system analysis and research as well as focuses impact on them.

The latter may be realized only in the management process of quality in narrow (tactical) plan — with an accent on the essence of quality of medical care and wide (strategic) plan — with an accent on factors, circumstances and prerequisites.

CLASSIFICATION OF THE REFERENCE SCIENTIFIC-MEDICAL NON-PERIODIC EDITIONS

T. Nikolov, P. Gogov (PRB)

In the last years the reference scientific-medical editions gain an ever wider audience. Containing varied and actual scientific-medical information, predominantly designed for the practitioners in the medical profession, they become an invaluable advisor to them and source of knowledge and experience for the protection, reinforcement and restoration of people's health. The social effect of these editions increases still more when the medical workers promptly and on a high diagnostic and therapeutic level solve problems concerned with the urgent and emergency conditions of the patients or find more effective diagnostic, therapeutic, rehabilitation and preventive possibilities. Their positive characteristics is also supplemented by some economic indices, disclosing new editorial and commercial activities.

The study, which we carried out, is comprehensive and includes 450 scientific-medical non-periodic editions, prepared and printed by the state publishing house "Medicina i fizkultura" during the period 1981—1985. The unit for observation was not only every edition corresponding to the definition "reference edition" given in the instruction for determination of the type and genre characteristics of the edition, but also according to the point of view of O.V.Malaha, T.V.Mulina (1983). According to them five are the most important features in determination of the typology of the reference editions: purposeful designation, reader's address, character of the information, structure of the edition, particularities of the getting up and polygraphic execution. According to the feature "purposeful designation" the reference editions are divided into encyclopedic, philologic or language dictionaries and manuals.

The qualitative characteristics of the editions from the group of "manuals" revealed that during the five-year period their number has attained 41 titles, which referred to the remaining kinds of scientific medical editions represented 9.11 percent. On the average the publishing house has annually published 8.20 reference scientific-medical non-periodic editions.

The quantitative analysis pointed out that in the field of the fundamental and preventive medical disciplines — anatomy, hygiene, epidemiology, microbiology, infectious and parasitic diseases, occupational pathology, toxicology, immunology the reference editions were of exclusively practical-applied character.

In the field of the clinical medical disciplines it has to be indicated that, on one hand, the reference editions were devoted to urgent and

emergency medical care, and, on the other, they contained abundant information for the indications, contraindications, administration and interaction of the drugs. Of other kind were the reference editions designed for quick check up in the field of the respective clinical and preventive medical disciplines.

A much characteristic group were the reference editions, elucidating some terminologic aspects generally in medicine or in some of its particular scientific-medical disciplines.

Depending of the appurtenance of the information with respect to the medical disciplines, the reference medical editions could be classified in the following way:

First group. Reference editions containing information only from particular scientific medical disciplines. Here two subgroups are delineated:

a) reference medical editions, devoted to particular problems of the medical sciences;

b) reference editions devoted to particular problems of the medical sciences, but related to urgent and emergency conditions in public health.

Second group. Reference medical editions in which is contained information, gathered from several medical disciplines.

Third group. Reference medical editions with summarized scientific information for the activities of particular categories of medical workers.

Fourth group. Reference medical editions, which are elaborated according to the requirements of the terminologic reference books.

In conclusion it has to be emphasized that in order to give a more thorough and comprehensive characteristics of the reference scientific-medical non-periodic editions of the publishing house "Medicina i fizikultura" a sociologic study of this interesting and searched by the readers' literature is necessary to be carried out. The study could give answer for the preferred reference editions, their periodicity of republishing, authors' selection, etc. For the time being, we suggest the use of the following classification:

First group. Monogenetic reference editions. They contain information of only one or two scientific medical disciplines.

a) designed for particular group of the medical manpower;

b) with information on a particular problem — for the urgent and emergency conditions, etc.

Second group. Polygenetic reference editions, which contain information of several medical disciplines. They could be also divided into:

a) designed for a particular group of the medical manpower;

b) elucidating a particular problem or several problems.

Third group. Terminologic reference editions.

**PROTECTION OF POPULATION
HEALTH AND ORGANIZATION OF MEDICAL CARE**

THE PROGRAM APPROACH IN POPULATION HEALTH PROTECTION

E. N. Shigan (USSR)

The present stage of scientific-technological progress is characterized by widespread use of computer-assisted scientifically sound methods of management in solving a variety of health problems. Although each sector, including the health care system, has its own specific features, it is possible to identify many shared operational problems that can be solved by developing universal methodological tools: systems approach, targeting, functional, structural, informational, regional and other types of analysis.

The past decade has witness impressive developments in application of targeting programming methods to the solution of very diverse management tasks. Such methods are increasingly being used by the health system to design and implement targeted comprehensive health programs, the medical sections of national economy programs (alimentation, power production, etc.), problem solving simulations in the teaching/learning progress, etc.

A targeted comprehensive program is a complex of socioeconomic, medical, scientific research, applied organizational and other measures, each provided with its particular resource, executive, and time-limit problem solutions.

Designing targeted programs is founded in systems analysis methodology: orientation to concrete problem solution, designing a tree of objectives, developing intersectoral and interdisciplinary collaboration, relating objectives and resources, objectives and executors, objectives and times, etc.

Development of complicated large-scale strategic health problems requires extensive preparatory efforts; solid funding; participation of various ministries and departments, research, teaching and service establishments; strict monitoring of progress in program design and implementation. Because of this, targeted programs are structured to include subprograms providing for organizational/legal, budgeting/supplying, and informational matters.

Organizational/legal provisions, in turn, subdivide into an organizational section (establishing a coordination council, task groups; manpower training, disposition and utilization; drafting calendar and network plans, etc.) and a legal section (a set of legally substantiated documents and steps ensuring the process of program design and implementation). Budgeting/supplying provisions deal with financing, equipment, transportation, computer hardware, etc. Informational

provisions contain two parts: information on the problem, and information on progress of program design and implementation.

Presently under development by the USSR health system are a series of specific targeted programs aimed at decreasing population morbidity from particular disease groups (cardiovascular, oncologic, etc.) and so-called integral or comprehensive programs. In particular, a comprehensive prevention program is aimed at promoting the role of factors (beneficially influencing the state of health and at correcting risk factors (use of alcohol, cigarette smoking, overeating, a sedentary mode of life, etc.) with a deleterious effect in many diseases.

Although the method of programming has been developed to solve complicated strategic problems, it can also advantageously be used to study smaller-scale problems and develop scientifically sound recommendations.

The procedure in using a program approach to solve health problems is relatively simple:

- problem formulation, priority assignment, and decomposition into subproblems;

- study of the problem and identification of factors with positive or negative impacts, controllable and uncontrollable factors;

- designing particular targeted programs to correct controllable factors;

- implementation of particular targeted programs devoted to: health education; reorganizing activities of curative-preventive establishments and health services; development of a new information system, new normatives; manpower training, etc.

- outcome evaluation in terms of effectiveness in attaining particular objectives and the general objective of problem solving.

For each stage of program design and implementation, use is presently made of its own set of graphic, expert, mathematical and other methods which allow to evaluate various options for problem solving.

EVALUATION OF THE INCIDENCE OF MORBIDITY IN CHRONIC NON-INFECTIOUS DISEASES BY WAY OF THE EXAMPLE OF THE MALIGNANT TUMOURS

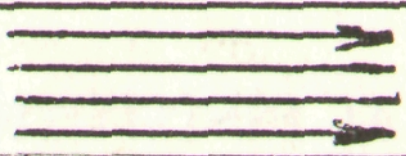
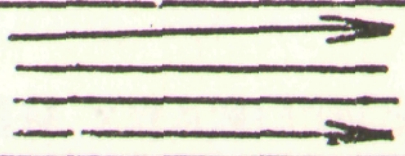
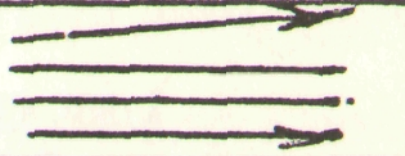
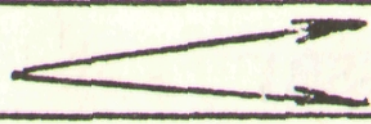
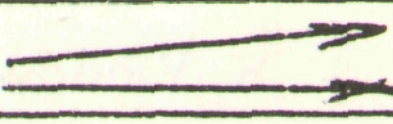
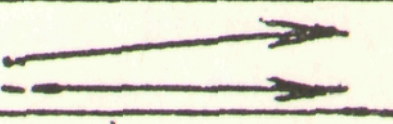
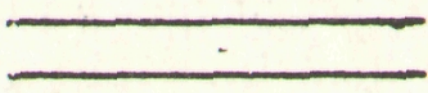
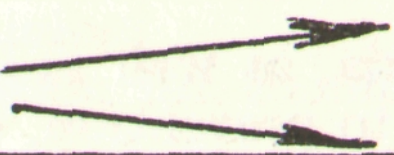
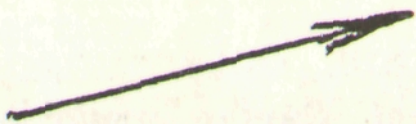
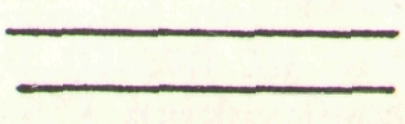
I. Dam (GDR)

The evaluation of the changes in morbidity and composition of the patients among the population in dynamics is very important for evaluation of the health status of the population. The changes among all present diseases and the diseases manifested at the moment of exa-

mination, depend upon demographic, preventive, diagnostic, therapeutical and epidemiologic processes.

The presented scheme points out the possible directions of action of the so-called epidemiologic factors of movement of all present diseases at the moment of examination among the population.

Morbidity data

Factors	All present diseases	Mean duration	Diseases at the moment of examination
Demographic			
Preventive			
Diagnostic			
Therapeutical			
Epidemiologic			

As preventive and epidemiologic factors we understand processes, which reduce or increase the morbidity risk. The remaining factors do not influence the morbidity risk, but exert an effect in various directions and to a various extent on all present diseases, on the mean duration and on the diseases at the moment of examination. The increase or reduction of one of these factors in a definite time is not possible to be considered as a result of changes in the risk, while other factors do not receive evaluation.

By way of example we could take the malignant diseases. On this model is shown what enormous influence is at present exerted by the changes in the structure of the population, the increase of the mean duration of life, as well as the quality of the given and available medical care, of early diagnostics and results of treatment of the patients.

The empiric determination of the duration and extent of all present diseases according to the most important epidemiologic factors requires much attention in the epidemiologic and research work. It is premise for new strategy in the diagnostics and treatment and determines the influence of preventive and epidemiologic factors upon the population, as well as is premise for real prognosis of determination of the number of patients among the population and the very basis

for planning of personnel and resources in health protection.

Presently, the necessity has occurred to combine old methods of investigation of chronic diseases with new methods, which correspond to the present social-economic conditions. This is a task of the contemporary social-hygienic and epidemiologic investigations. It is not yet possible to solve this task today, because the accumulation of material of data is for the time being insufficient. It is important that the leading health personnel is acquainted with it and do not allow an incorrect evaluation of the morbidity development.

USE OF TEMPORARY MEDICAL INSTITUTIONS IN VIEW OF SECONDARY PREVENTION AND REHABILITATION OF SOME DISEASES

K. Vihodskiy (CSSR)

In Czechoslovakia, as well as in other socialistic countries, exists a complex approach to prevention, treatment and rehabilitation of the most propagated diseases.

The political line of health protection, determined by the congresses of the Czechoslovakian Communist Party emphasizes as particularly important the cardio-vascular and oncologic programs, as well as the protection of maternal and child health. Together with the general measures, adopted in all socialistic countries, in Czechoslovakia are developed various forms of complex therapeutic-preventive care within the frame of separate programs, including the use of temporary health institutions.

Since already 13 years in the West-Czech region temporary medical institutions are organized for patients, having undergone myocardial infarction. Their activity is directed to secondary prevention of infarction recurrences. The physician attendance is realized by specialists in the field of cardiology, medical gymnastics and medical rehabilitation. In the temporary hospitals summer and winter courses of treatment and rehabilitation are carried out, the duration of which is up to 10 days.

The principal tasks of the temporary medical services are the following:

1. To inform the patients on the different possibilities for restoration of the motor activity;
2. To check by means of ergometry the adequacy of the established individual training regimen to the possibilities of the patient;
3. To ensure psychic relaxation of the patients, reduce the sense of anxiety, depression, to increase self-confidence;

4. To reinforce the correct and necessary life habits (no smoking, dietary measures, daily regimen, etc.).

The temporary medical institutions are usually organized on the basis of the resort stations, sportive institutions or health resorts. The expences for the dislocation of lodgings and nutrition are ensured by the district hospital. Hospital files are issued to the participants in the courses of treatment and rehabilitation.

Analogous temporary health stations are organized for the diabetic patients. Premise for selection of the participants is the unstable subcompensated diabets and its complications. In these patients it is necessary to create the appropriate stereotype of treatment, life regimen and active rehabilitation. During the cource, which lasts more than two days, must be ensured:

1. Check of the metabolic balance and homeostasis under conditions of full life loading;
2. Determination of the rational diet;
3. Getting the patients accustomed with hygienic knowledge and habits, concerning their disease, dietary treatment and rehabilitation, including relaxation and training;
4. Realization of the preparation for training, increase of the resistance.

The selection of patients is carried out by the district specialist on diabetology. In the temporary medical services are working physicians — specialists, dietary nurses, nurses, laboratorians, psyhcologists, etc.

On the basis of the positive experience of the temporary medical services, this form of medical care is also used in the treatment of hemophilia and asthma in children of school age. The temporary medical services for treatment of hemophilia in children are chiefly justified because the complex treatment of hemophilia is limited by the frequent complications, namely joint and muscular bleedings. Under the conditions of the temporary medical institution the rehabilitation is directed towards restoration of themobiliry and reinforcement of the physical and psychic possibilities of the patients. The duration of the course is usually 1 month. The work in these institutions is very complicated and work-consuming. In the health stations work specialists hemato-logists, pediatricians, psychologists, pedagogists, child nurses, laboratorians, rehabilitators, host and technical personnel. Close collaboration is necessary with the blood banks, which prepare the necessary quantity of blood derivatives and cryoglobulins for prevention and treatment of the bleedings.

The selection of the children for the courses is directed to the diagnostics of arthropathies, contractions and other disturbance of mobility. The results of the treatment of these complications of hemo-

philia are much positive, the motor function and psychic status of the affected children obviously improve. The activity of the temporary medical institutions for treatment of asthma in children are associated with speleotherapy, which improves the health conditions of the children, reduce the number of the asthmatic attacks and improve also the premises for psychic relaxation and for active complex rehabilitation.

The physicians specialists and the patients appreciate positively this form of organization of the treatment, which is confirmed by objective investigations (ergometry, goniometry, etc.). The long-term follow-up of the patients gives also positive results. This experience also points out that there are still a number of non-utilized possibilities, when without investments, without increase of the personnel units, of the number of the institutions and of the expences, but rather on behalf of new organization forms of medical care could be improved the health of the population, could be ensured treatment and rehabilitation of definite groups of patients and be trained in the healthy mode of life.

In our country positive experience is accumulated for the activity of the temporary medical institutions of hospital and out-patient types on three disciplines: cardiology, pediatric pulmonology and hematology. But we are deeply convinced that this could also be possible for many other disciplines under the conditions of introduction of new organization of the therapeutic-preventive and rehabilitation care to definite groups of the population.

INTEGRAL TARGETED PROGRAM OF POPULATION HEALTH PROMOTION

A. P. Grishkyavichyus (USSR)

The method of programming is increasingly being developed in the practice of the Lithuanian SSR health care system. Apart from programs aimed at reducing morbidity and mortality rates from particular diseases, an integral program is being developed to promote population health. Without going into details of program description, the content of its main sections are as follows:

1. Definition of basic concepts in targeted comprehensive planning and substantiation of the appropriateness of using this method in health care.

2. Statement of the "Republican comprehensive program of disease prevention and health promotion in the Lithuanian SSR population up to year 2000, 'Health 2000' "

- 2.1. Setting the general objectives of the program and its substantiation. Possibilities for quantitation.

2.2. Stages of program development and formation.

2.3. Structure of the program "Health 2000".

2.4. Characterization of major subprograms: protection of atmospheric air; protection of soil and agricultural produce; wastewater treatment; wholesome food; healthy working conditions; optimal schooling conditions for children, adolescents and adults; promotion of healthy life style; medical programs proper (integral program for primary prevention of non-infectious diseases, dispenserization program, etc.).

2.5. Linking the "Health 2000" program with other republican targeted programs.

2.6. Providing resources for the program.

2.7. Conditions for incorporating the program into republican social and economic development plans.

2.8. Management of targeted comprehensive program design and implementation.

2.8.1. Overall management: interdepartmental council.

2.8.2. Management of individual subprograms.

2.9. Criteria and indicators for evaluating the effectiveness of actions undertaken within the comprehensive program.

2.10. Further program development and improvement.

3. Popularization of the "Health 2000" program from the standpoint of socialist life style. Making each collective, each individual aware of the main provisions in the program will open the way to attainment of the program's ultimate objectives, contributing to both community and individual health and creating an atmosphere of social and life-asserting optimism.

SUCSESSES IN THE DEVELOPMENT OF HEALTH PROTECTION IN SOCIALISTIC CUBA

S. Sanches, N. Niko (Cuba)

With the victory of the Cuban revolution started transformations in all spheres of social life of the Cuban people. Profound changes in the social-economic structure allowed the state to detach more attention to the development of education, health, sports and culture of the population which were proclaimed as "people rights".

With the beginning of the sixties years changes occurred in the development of health protection in Cuba: the Ministry of Public Health was formed as an organ responsible for the solution of tasks of the health services on national scale, creating intermediate provincial and district units in the system of health administration. The state

assumed on itself the responsibility for people's health, detaching to this problem first-grade attention. As soon as in the first years after the revolution, the state released means for building of 50 hospitals and 55 medical stations. The realization of this construction ensured a high accessibility for treatment of the rural, as well as of the urban population.

A law for the medical and stomatological services in the rural areas was passed. According to this law, the first in the country deconcentration of the physicians out of the capital and of the big cities was produced and they were directed to work in the rural areas. In the provincial centers medical schools were opened for preparation of nurses for work in the rural areas.

Nationalisation of the pharmaceutical industry was carried out.

With the financial and technical assistance of international organization in the first years after the revolution was created and realized a program for preventive measures — doing of vaccinations, healing of the environment, services for protection of maternal and children health were installed. In the solution of the health tasks the whole population practically took part.

Of important significance for the consolidation of health administration was the creation and strengthening of the system for summation and processing of medical information, allowing much exact evaluation of the situation and analysis of the achieved results.

It is very important that actually the health services embrace all layers of the urban and rural population. The fundamental health institutions as early as in the first years after the revolution involved such fields of medicine as obstetrics, pediatrics, general medicine, dental health, sanitary-hygienic control, epidemiologic surveillance, diagnostics (special laboratories, offices). Social aid was created. Considerably widened the preparation of new medical personnel, its qualification increased.

All above-stated allowed the elaboration of health programs in three fundamental groups:

A. Program for health protection of the population, drawing predominantly the attention to health of the females and children, assurance of dental health to the population, conduction of the necessary epidemiologic measures.

B. Program for protection of the environment, including communal hygiene and environmental hygiene, hygiene of nutrition, occupational hygiene and school hygiene.

C. Program for health administration and for its constant optimization.

Of course, the realization of all these programs would be impossible without the active participation of the broad masses of the people

In the beginning of the seventies years Cuba was included in the number of countries-members of SEA. In the socialistic camp it received its integral duties also in the field of health protection, particularly, intensification of the biomedical investigations. From this period, the planning of all health tasks became the central axis of all health services in the country.

In 1976—1980 our country fulfilled its first five-year plan of development of the national economics, which allowed to increase the number of hospital beds to three thousands (5.4 beds to thousand population), to enlarge the network of general and dental health outpatient departments, social institutions for old people.

In the country the children mortality abruptly was reduced (from 60 in 1959 to 19.4 to 1000 at present).

The mean life of people increased from 58.8 years in 1959 to 71 years in 1979.

The Cuban medical specialists participate actively in international scientific collaboration, in Havana frequently are organized world and panamerican congresses, conferences, dedicated to different problems of medicine.

The Cuban Ministry of Public Health does not rest on the achieved successes. In every five-year period and for a longer period up to the year 2000 are elaborated and embodied into life new plans. With the execution of these plans we achieve new successes in health protection, which not only remove remaining defects, but also create optimal conditions for protection and ensurance of the health of the whole Cuban nation.

PRINCIPAL TASKS OF THE CONTEMPORARY STAGE OF DEVELOPMENT OF NATIONAL HEALTH IN SOCIALIST REPUBLIC OF VIETNAM

Nguyen Han Zi (SRV)

The Republic of Vietnam began the edification of socialism more than 30 years ago (since 1954). But war, induced by the French colonialists and American imperialists, destructed the economics of Socialist Republic of Vietnam. For the restoration of the economics up to no less than 3—4 five-year periods are necessary. Finally, all this bears an influence upon the health status of the Vietnamese people.

In view of solution of a number of problems concerned with health protection, in front of us stand a number of tasks at the present stage of development of the country.

The health protection in SRV is closely bound to the improvement of the material and cultural conditions of the working population and firmly follows a preventive direction.

In health protection of SRV exists a tendency to unification of modern medicine with the traditional one. Health protection in SRV is orientated towards "single-handed ensurance of medical care", which does not also exclude the use of external aid, which has been afforded and is afforded to the Vietnamese people by the peace-loving countries in the world.

At present particular importance is acquired by:

1. Nation-wide movement for health strengthening and effective realization of three hygienic aims: ensurance of pure water, remoteness of the toilets, personal hygiene;

2. Performance of extensive periodic vaccinations for prevention of pediatric infections and epidemiologic diseases, as well as for elimination of the focal infections and epidemics in the regions with high risk;

3. Increase of the level of physician's attendance. Active prevention and treatment of the social diseases, at the first place the venereal diseases, tuberculosis and malaria, as well as active development of the out-patient follow-up;

4. Realization of a program for family planning, including active treatment of the gynecologic diseases and constant follow-up of the pregnant women;

5. Ensurance of drugs to the population, mainly in the districts and villages; use of the traditional medicines; liquidation of the deficiency of drug substances in the realization of the antiepidemic measures, in the emergency services and in pediatrics, as well as the shortage of the principal drugs for general use;

6. Consolidation of the health system in the rural areas for increase of the effectivity of primary medical-sanitary care. Due time encouragement of the individual medical workers and teams for successes in the movement of socialistic competition in the field of public health.

The successful solution of these tasks, standing at the present stage of development of public health in SRV, would allow improvement of the health status of the Vietnamese nation.

PATTERN OF INTEGRAL AND PROGRESSIVE SYSTEM OF EMERGENCY MEDICAL CARE

L. Molnar, B. Illesh (HPR)

In view of achieving reduction of the mortality rates in the population from cardio-vascular diseases and accidents, a mathematical pattern was elaborated for the organization of the necessary emergency and highly effective medical aid.

The forms of relations and continuity in the activity of the district general physicians, stations of emergency medical care, admittance wards, as well as resuscitation and intensive therapy wards were followed up and studied. The study allowed to optimize the system of information ties and the management of the system emergency hospital admission.

For the effectivity of the elaborated pattern evidence is given by the positive dynamic achievements in reduction of prehospital mortality, the considerable shortening of the time necessary for hospital admission of the patients from the moment of occurring of the critical situation, as well as by several other indices.

PROGRAM OF PUBLIC HEALTH AND SOCIAL SECURITY IN PPR FOR 1986—1990

M. Murkovsky, T. Parhimovich, S. Zelinsky (PPR)

In Polish Popular Republic great importance is invariably assigned to the problem of health protection of the working people. The elaboration of the five-year programs of public health are with respect to their character an interdisciplinary integral part of long-term planning, coordinated by the Planning Commission at the Cabinet of Ministers of PPR. In such a formulation, the "Program of public health and social security" has the character of a preliminary planning elaboration.

The main point of the preliminary planning elaboration is reduced to the study of the requirements of the population in the field of health protection, to formation of important objectives, which must be attained for improvement of the population health, development of public health and social security, as well as directions and possibilities for their realization.

According to the respective decrees of the Presidium of the Cabinet of Ministers of PPR, the branch and departmental Ministries are obliged to take into consideration the recommendations resulting from the programs associated with the elaboration of the prognosis

of development and the suggestions for the social-economic plan of development for 1986–1990, as well as for the projects of the annual plans.

In the light cast by the prognosis of formation of the population health status and the demographic conditions of the country, as well as in view of the strategy of WHO "Health for all up to the year 2000", the main objective of public health in PPR is the improvement of the population health status, including the particularities:

- reduction of the high mortality in males;
- reduction of the morbidity indices in sucklings;
- increase of the mean duration of life.

The realization of these objectives necessitates the extensive collaboration and, in the first place, the improvement of the environmental conditions, as well as principally positive changes in the attitude towards health and social security of the population. The program outlined contains also analysis of the concrete requirements and possibilities of the country. It determines the tasks of the health system, sanatoriums, social security, specialized manpower material basis, supply of technics and medicinal agents.

The special part, the realization of which predetermines success in achievement of the above-stated tasks, refers to the organization and administration of the public health system and the economic-financial possibilities for the realization of the program.

The medical manpower is presently one of the most serious problems in the public health system. At the end of 1984 in PPR there were 71.0 thousands physicians, 17.3 thousands physicians-stomatologists, 16.0 thousands pharmacists, 172.1 thousands nurses, 19.0 thousands midwives, who calculated to 10 thousands of inhabitants amounted respectively to: 19.2, 4.7, 4.3, 46.4, 5.1. The solution of the principal manpower problems from our point of view would be possible with the achievement of indices of ensurance of about 22 physicians to 10 thousands of inhabitants, 5.6 physician-stomatologists, 5.6 pharmacists, 58 nurses, 6.0 midwives. Nevertheless, only with respect to physicians, nurses and midwives the planned indices could be reached up to the year 1990. Irrespectively of the expected high number of graduates, in the remaining groups the increase of manpower will not be great (only up to the level of 4.5–4.9 to 10 thousands of inhabitants).

Together with the problem of the quantitative deficiency of manpower, a substantial problem in all professional groups (as well as also in the technical and attending personnel) is the disproportion in their territorial dislocation and distribution to the different branches of public health. These phenomena are induced by the defects, taking place in the solution of the problems of salaries, social and lodging problems of the medical personnel.

The program of capital investments for 1986—1990 takes into consideration the requirements of public health and social security, ensured according to the evaluation of the real material and financial possibilities. Its realization is obliged to ensure: increase with 30.9 thousands of the hospital beds, 10.7 thousands of the places in stations for social assistance, 160 health centers, 140 out-patient departments and 4 thousands places in the nurseries. The effective increase of the number of hospital beds amounts to 19 thousands, of the places in stations for social assistance — about 8 thousands, which will insignificantly increase these resources, reaching in 1986 about 60.5 thousands beds (at present — 56.1) and 19.4 places in the stations for social assistance to 10 thousands of inhabitants).

In the field of technical and pharmaceutical provision, the main problems are solved on central level — by way of agreement between the Ministry of Public Health and Social Security and other ministries, engaged in production and import. Nevertheless, in this respect of importance are also the local initiatives.

In view of optimal use of the available resources and means in realization of the principal directions of activity of the public health system as a whole, will dominate the increased effectivity and rationalization in the work of the public health institutions. The main factors, ensuring the achievement of the objectives determined by the program, are called to be the reserves, present in the existing potential, which ought to be at first known, and then appropriately used.

SUCSESSES AND TASKS ON REDUCTION OF INFANT MORTALITY

M. Fuchs (GDR)

Infant mortality represents an important index of the health level of the population. It characterizes not only the development of health care in the country as a whole, but also the maternal and infant protection in particular.

In GDR for 40 years after the defeat of fascism by the Soviet Army it became possible to reduce infant mortality from 131 to 10 for 1000 new borns in 1984.

This development proceeded in stages, determined by the modification of the social factors, as well as of the therapeutic-prophylactic measures of the health system. If comparison is made on an international scale, in the reduction of infant mortality regularities are established.

— First stage (1946–1949) characteristic by the overcoming of the consequences of the war. The main efforts were directed to the struggle with hunger and infectious diseases, as well as to the realization of hygienic measures.

— In the second stage (1950–1958) a system for social and medical aid to mothers and children was realized. A network of female health centers, obstetrics wards and child health centers was organized. About 1960 infant mortality was reduced to 40 for 1000 new borns.

— The third stage (1959–1969) was characterized by purposeful struggle with infant mortality with the participation of special commissions on reduction of infant mortality in all regions and districts. These commissions worked on preventive principle and estimated whether every mortal case was inevitable. About 1970 infant mortality was reduced to 20. This fourth stage was characteristic of its intensive measures on reduction of perinatal mortality. Close mutual work between obstetricians and pediatricians was organized, as well as health administrators. The scientific-medical society "Perinatal medicine of GDR" was founded. In 1984 firstly in GDR infant mortality was reduced to an average level for the country of 10 for 1000 new borns.

The task of the following years consisted in reduction of the present differences between the districts and execution of special measures so that the infant mortality in GDR would reach those countries, which are leading in this field.

The realization of the social-political program of the United Socialistic Party of GDR, the improvement of the quality of maternal and infant health protection, the extension of the quantitative and qualitative ensurance of medical and social attendance represent important premises for the solution of the assumed task.

SOME HEALTH INDICES OF THE POPULATION OF THE HUNGARIAN POPULAR REPUBLIC AND PERSPECTIVES FOR THEIR CHANGE IN THE LIGHT OF THE OBJECTIVES OF THE REGIONAL STRATEGY OF WHO

I. Forgac (HPR)

In the present report the question is asked: what are the perspectives of health protection in HPR for achievement of the aims of the complex program of the regional strategy of WHO?

The health of the population of HPR has considerably improved in 1950–1965 at relatively moderate rates of the increase in the volume

of medical care. Nevertheless, after 1965 during a period longer as compared with the former ones the investments did not lead to substantial improvement of the health of the adult population, which with respect to a number of chronic non-infectious diseases even worsened. This contradiction we could explain by the changes, which occurred in the mode of life of the population and the magnitude of the risk factors.

We could cite some indices for the health conditions of the population in the last 15–20 years on the data of mortality in the most threatened groups by sex and age. In 1970 in HPR survived 1922 thousands, and in 1980 — 1941 thousands of males within the age group of 40–69 years, which represented respectively 36.15 percent and 35.17 percent. In 1984 this group consisted of 1 919 327 (34.80 percent). In 1980 the mortality rate represented 1842/100 000 males, i.e. 30.9 percent of the higher index in 1970. At the present tendency in the dynamics of the mortality rates, the achievement of the expected mean duration of life up to 75 years for males as it is determined by the aims of the Regional strategy of WHO is slightly probable.

The mortality rate in the age group of 40–69 years from cardiovascular disease represent 840/100 000, in 1980 and for the last 10 years it increased approximately to 33 percent. The mortality rate from vascular affections of the brain in 1980 represented 224 for 100 000 males. This mortality rate among males of the age group of 40–69 years in 1972–1982 increased to 59.1 percent. The mortality rate from vascular affections of the brain increased from 1972 to 1982 in the males of the age group of 40–44 years to 90.9 percent, in the age group of 45–49 years to 126.5 percent, in the age group of 50–54 years to 98.1 percent, in the age group of 55–59 years to 62.7 percent. From these data it follows that it is impossible to reduce the mortality of the population up to 65 years from cardio-vascular diseases to 15 percent in 2000 year, as it is expected by the Regional strategy of WHO.

The rate of the deceased by malignant neoplasms represents 22 percent of the total number of deceased males in the age group of 40–69 years. The mortality rate from malignant neoplasms of the lungs increased to 44 percent for the past years (1970–1980). The mortality rate in males from accidents increased in the age group of 15–39 years to 15.2 percent from 1970 to 1983. Therefore, the reduction of the mortality rate from accidents to 25 percent also represents little real about the year 2000. The magnitude of the number of suicides from 1980 to 1982 reached to 35.4 percent, also giving no reason to suppose that this tendency could be modified.

The second group of aims of the regional program of WHO concerns the reduction of the noxious factors to the healthy form of behaviour and the risk factors. But from 1960 to 1981 the individual

consumption of fats increased from 21 to 32 kg, of sugar — from 25 to 35 kg, and of alcohol — from 6.1 to 11.6 l. The part of smoking males older than 15 years consists 38 percent, the sale of cigarettes increased from 22 449 million pieces in 1970 to 27 224 millions in 1983, while the mean number of cigarettes of the smoking people represents actually 35 pieces daily. The number of individuals with socially dangerous form of behaviour also increased to 39.3 percent among the males of the age group of 30—39 years from 1970 to 1983.

For establishment of the unfavourable processes, precised elaboration of complex purposeful programs is necessary, directed to modification in the mode of life and health conditions of the population, of its economic and social conditions.

In the field of medical care of the population we did not succeed till now to organize a system for control of the quality, effectivity and of getting interest. It is not possible to evaluate the effectivity of the number of physicians or the rate of their augmentation. The initial criteria of the effectivity must be the indices of improvement of the population health conditions as compared with the expenses of the organization of medical care.

The material-technological conditions of the medical care in HPR occupy a firmly medium place, but the mortality rates of the adult population, particularly males in the age group of 40—69 years are still very high. This could be explained by unfavourable influence of the various risk factors. The removal of these risk factors ought to be the basis of primary prevention.

LIFE STYLE AND HEALTH OF THE ELDERLY AND OLD POPULATION

I. A. Motynga (USSR)

Over the past decades, the proportion of elderly and old people among the USSR population has increasingly been growing. This demographic process, typical of industrially developed countries, gives rise to new needs in the community; among the problems to be studied in this regard are those of the life style, health and maintenance of residual working ability upon retirement on pension.

From a social health viewpoint, particular importance is assumed by the process of adaptation, since retirement on pension and cessation of working activity is one of the most critical periods in man's life.

One integral indicator of a community, its "coefficient of efficiency", should be implied to mean the summed time, over a given period,

that is spent on labour, education, recreation, etc. (the hours of active life). Based on this indicator, it should be possible, apparently, to outline future complex actions and programs aimed at protecting the health of the retired population, maintaining its working ability, evaluating the health status and its prospects for this population segment as a whole.

For a community of developed socialism, it is within reach to translate into reality a fundamental postulate of marxism-leninism according to which true "wealth" is the time at your disposal. (K.Marx)

As indicated by investigations, the summed costs of meeting medical needs and of losses incurred by economy through medical indications are to rise in the nearest 15 years. However, to be considered thereby are the appreciable untapped reserves that could be made available by raising the working ability and maintaining the health of the retired population.

Losses of a medical nature that are related to life style and health of the elderly and old population have been distributed in our work into two groups, avoidable (K1) and unavoidable (K2). The proportion of group K1 losses averages presently 30—40 percent, and that of group K2 losses 60—70 percent. By extrapolation, it was found that in the next 15—20 years a further increase in the proportion of group K2 losses is to occur.

Therefore, the variations in community needs for health protection of the retired population and in the extent to which these needs are met will be related to the interplay between the groups of actions influencing indicators K1 and K2. When this is taken into account, it is possible to identify the best ways to develop medicosocial care for the retired with the help of a medicosocial program designed to protect man and his environment. To be observed thereby are the following principles: comprehensive nature of the program; adjustment of general objectives to resources; complex combination of long-term, perspective, and current planning; coordination of organizational structures, information, and contemporary planning methods.

Planned actions should be directed not so much maintaining working ability as to prolonging the creative period of life in the retired population.

Actions undertaken to influence indicators K1 and K2, as well as designing and implementing medicosocial programs furthering adaptation after retirement will help carrying out dispenserization of persons who have retired or are about to retire.

From analysis of data reported in the literature and those obtained in our own studies on life style and organization of medicosocial care for the retired population, evidence was provided that pointed to the importance of human adaptation problems at retirement and allowed

to formulate a number of proposals for further improvement of health maintenance in the elderly and the old, taking into consideration the particular features of their mode of life.

POTENTIAL DANGER OF OCCURRENCE OF ISCHEMIC HEART DISEASE IN MALES AGED 40—59 YEARS

A. Panev, I. Vasilevski (PRB)

Epidemiologic study was carried out on the risk factors in ischemic heart disease in males aged 40—59 years (7136 individuals) by the method of random selection. Determination was made of the incidence of these factors, of the interrelation and interdependence between them.

In the study no final event was determined, i.e. no registration was done on the presence or absence of ischemic heart disease, but was only determined the potential danger for its occurrence on the basis of present risk factors, alone or in combinations. It is confirmed that between presence and degree of expression of the risk and the occurrence of ischemic heart disease exists a direct dependence. This regularity is laid at the basis of the elaborated differential-diagnostic table, by means of which is determined the potential danger for occurrence of ischemic heart disease in males and the risk group is formed. In the risk group the theoretical probability of occurrence of ischemic heart disease is assumed, which increases in connection with the number and degree of expression of the risk factors in every individual. The high potential danger in definite age, social, professional and other groups is associated with high incidence of the risk factors in these groups, which give possibility to introduce a definite concreteness and direction in the conducted preventive measures for the particular individuals, as well as for the definite population group.

In 24.1 percent of the examined groups of males aged 40—59 years a combination of the risk factors was established, which determined their appurtenance to the group with potential danger. The remaining males (75.9 percent) formed the group of healthy individuals, in whom with lesser probability could be expected the occurrence and development of ischemic heart disease, but such an event could not be excluded.

The distribution of the number of males in the risk groups according to age groups — ascending, few of them fell in the group of 40—44 years (14.3 percent), while more to the group of 55—59 years (33.0 percent) (Table 1).

Table I

Danger for occurrence of IHD according to age groups

Age groups	Total		Risk groups		Healthy individuals	
	Number	percent	Number	percent	Number	percent
40—44	1619	100	321	14.3	1388	85.7
45—49	1788	100	390	21.8	1398	78.2
50—54	1901	100	498	26.2	1403	73.8
55—59	1828	100	603	33.0	1225	67.0
Total:	7136	100	1722	24.1	5414	75.9

The specific weight of the individuals with risk factors for occurrence of ischemic heart disease, getting into the risk group — different for every social group. The lowest (17.9 percent) was for the industrial workers, followed by the agricultural workers (20.9 percent) and approximately by two times higher was the percentage of the employees (37.5 percent) (Table II). This was regular, i.e. it has been already established that the appurtenance was in direct relation with the character of the executed work and the occupational factors, associated with it. Moreover, the danger for occurrence of ischemic heart disease was in direct relation with the age, owing to which the incidence of appearance of new cases of ischemic heart disease was expected in the more aged groups as it is reported in almost all investigations.

In view of unification of the age groups if the examined males standardized indices were calculated in the social groups of the individuals of the risk groups. In them the comparison with the gross indices showed no different tendency. On the first place potential danger for occurrence of ischemic heart disease was established in the employees — 36.1 percent, on the second place — in agricultural workers (20.5 percent), and on the third — in industrial workers (18.6 percent).

According to the level of education, the risk for occurrence of ischemic heart disease in individuals with higher education (44.05 percent) was by two times higher than in individuals with primary and secondary education (20.1 percent and 20.2 percent).

Considerably more exact data were obtained by making the analysis according to social groups and the type of profession. By this complex characteristics of the individuals it was established that only 11.7 percent of workers engaged in light or moderately heavy work fell into the risk groups, while those engaged in heavy work — by four times more (44.0 percent). Among agricultural workers, according to the character of the work, the risk was the same (10.7 percent and

Table II

Danger for occurrence of IHD according to social conditions

Groups social conditions	Total		Risk groups		Healthy individuals	
	Number	percent	Number	percent	Number	percent
Workers	3131	100	561	17.9	2570	82.1
Employees	1955	100	733	37.5	1222	62.5
Agr.workers	2050	100	428	20.9	1622	79.1
Total:	7136	100	1722	24.1	5414	75.9

44.7 percent). Much vividly was this dependence expressed in employees, particularly in individuals engaged in intellectual work, associated with nervous psychic tension — 71.8 percent. To a general extent, the risk for individuals engaged in intellectual work was more than by twice greater than for individuals, engaged in physical work.

The determination of the potential danger for particular individuals, as well as for groups — age, social, professional and others, represent an objective premise for estimation of the volume, character, specificity and organizational approach to the necessary preventive measures.

BEHAVIORAL RISK FACTORS AND HEALTH POLICY

H. Palosuo (Finland)

Human behavior relating to health and disease has in the last years increasingly drawn the attention of medical scientists and health workers throughout the world. Behavioral factors were defined as a concept and studied — depending on principal objectives — under various designation, such as “healthy habits”, “harmful habits”, “disease-preventive habits”, and so on. The general conclusion arrived at was that a person’s life style is, in itself, of greater significance in the occurrence of epidemic than conventional factors of community life, such as levels of nutrition and sanitation. People “destroy” their own health through harmful habits: cigarette smoking, alcohol abuse, improper diet, insufficient physical activity, etc. Although problems of an “unhealthy” life style have assumed importance mostly in developed countries, they are of interest to developing countries, too; in the latter case, however, more from the standpoint of personal responsibi-

lity for one's health. The present communication will consider the question of so-called harmful habits as a subject of epidemiological research.

The problem of interrelations between habits and individual health has its history. In ancient Greece, temperance in "habits" was esteemed as virtue. Hippocrates included diet and physical exercise in his methods of cure. When "modern stimulants" — tobacco, strong drinks, coffee, tea — came to be known in Europe, they were utilized in the capacity of medicines, and this idea of their use persisted till our century. In 18th century Finland, one of the most serious hazards of smoking was thought to be the menace of setting the house on fire, and restrained of such habits as smoking and use of alcohol was largely dictated by moral and economical considerations.

The last years have witnessed the appearance of a dishearteningly abundant amount of reports concerning "unhealthy" life styles, with particular emphasis on cigarette smoking, use of alcohol, improper diet, and insufficient exercise. In the majority of investigations focusing on healthy and "unhealthy" life styles, behavioral factors were dealt with in the same way as any pathogenic factors influencing health. The purpose of such studies was to elucidate general morbidity patterns as they relate to harmful habits.

The objective of health policy was to disclose such risk factors that are amenable to control and change. As a matter of fact, human behavior is, in principle, inclined to be influenced and modulated; however, this is not to be achieved mechanically, by simply forbidding a style of life that may possibly lead to disease. One drawback in most studies was the lack of a clear definition of health. Implied in such cases was physical health. This concept is often too narrow to be usable. Harmful habits — cigarette smoking, use of alcohol, fats, sugar, sexual connections without due precaution, etc. — are subjectively experienced by people as gratifying. In other words, what is harmful from a medical (biomedical) point of view, is frequently perceived as pleasant and, in one way or another, largely contributing to maintenance of intrinsic balance of the personality in everyday life.

In the past, control over use of stimulants as well as other habits associated with pleasure was based on moral and religious notions.

By standard definition, social regulation is used to exert influence on behavior that is a deviation from normal, in the sense that it is considered harmful to the community and to the individual himself. From the standpoint of social regulation, use of alcohol thought to be improper, especially for women and children. Use of alcohol, hard drinking in particular, was considered to be harmful to normal functioning of the community. This argument has not lost its significance, but an additional reason has been advanced in favor of health: drinking

is a hazard to the personality (the individual), and even when it is not a deviation from normal from a social view, it may still be regarded, on the contrary, as a deviation from the medical standpoint, where health is seen as the most valuable asset of the community. Because of this, control appears to be justified. The shift of accent from moral regulation to regulation from the health viewpoint was readily effected, with a moral element presumably still present, since health itself is a particular type of "good", and deviation from health and healthy behavior may be appraised as "bad". Judgement on what is "healthy" and what is "unhealthy" implies use of moral categories.

Nowadays, use of alcohol, cigarette smoking, dietary habits, physical activity, and sexology are all factors or problems of concern to epidemiologists, while at the same time being subjects of study in the fields of sociology and psychology.

As regards health and sociology, the major line of inquiry has been the search for approaches to regulate behavior, that is, the aim of investigations has been to collect technically useful information that would allow actually to predispose people to a behavior favoring improvement of health.

In any event, the technically useful knowledge presently available is still inadequate to achieve such improvement, if people's health is taken in the wider sense of the word. Apart from the need to clarify relationships between behavior and illness, there is a need for better understanding of behavior in its social, psychological and cultural contexts.

SOME PROBLEMS OF THE IMPROVEMENT OF STATISTICAL INFORMATION IN HEALTH ADMINISTRATION

I. S. Sluchanko (USSR)

The significance of statistical information for the objectives of the administration is determined by a number of situations: how much it helps for the follow-up of the fulfillment of the tasks assumed by public health, possibility to be used for determination and realization of the decisions on the various levels of the system, operative character and flexibility of the information by means of computers, confidence in the quality and reliability of the information, etc.

The further improvement of the sanitary-statistical information could be considered in the development of each of these situations.

The existing system of statistical accounts not always gives possibility to follow up the development, dynamics, character and main point of the fulfillment of the various public health tasks. The process of ful-

fillment, the tasks and result indices are difficultly correlated. For example, the task for improvement of the quality of medical care could not only be controlled on the basis of the reports. A series of selected investigations, inquiry of the population, expert evaluation of the medical documents, control for the raise of the qualification of medical manpower, etc. must be involved in the development of the given situation. The improvement of this kind of information is determined by the methodical elaboration and unification of the standard inquiries, programs, expert's reports, investigations, which could be summarized according to selected investigations for all and used for operative decisions on various levels. There is experience from such a work, while the introduction and utilization of computers considerably facilitate this work.

The improvement of the information on the follow-up of the fulfillment of tasks on the complete development of the preventive trend and, particularly, on the out-patient follow-up of the whole population has a multiaspect development. It is solved on the level of the characteristics of the population group, for administrators and specialists of various levels and profiles. To find for everybody and to determine the necessary information still lays ahead of the statistical services and specialist-health administrators. This information must contain not only statistical evaluation at the definite moment, but also dynamic characteristics of the health changes and the measures carried out in the individual and the team. Great experience is already accumulated on the elaboration and utilization of automatic dynamic systems for survey and administration of the population's health by means of therapeutic-preventive, organization and other mechanisms.

The development of the informative systems, called to look after the solution of public health tasks, allowing operative use of information in the administration, increases the flexibility, operative character, extension and thoroughness of the informative program closely related to the development and introduction of computers, organization of the statistical services and training of their personnel. The prediction of the plans for health development by the information bases of the establishments considerably widens the possibilities for obtaining and use of information for the objectives of the administration at various levels with its processing, transfer, conservation and analysis of the material. The computers, on the basis of the statistical information, solve analytical tasks, so necessary to the administration, help to determine with complex evaluation and integral indices the characteristics of health and health protection. The further development of systemic approach to administration requires from statistical information most extensive elucidation and selection of the interestablishment and outer relations.

PROBLEMS IN PROVIDING INFORMATION FOR NATIONAL HEALTH PROGRAMS

T. Cholakova (PRB)

A number of national health programmes, either sectoral or inter-sectoral in nature, are operating in Bulgaria. Thus, for instance, there are programmes concerned with occupational health and safety, promotion of a healthy style of life, control of infectious and parasitic diseases, control of some prevailing chronic diseases (cardio-vascular, malignant neoplasms, chronic nonspecific pulmonary diseases, etc.).

In our country, national health programs rely for information on an existing health information system that functions in close contact with other information systems centered on demography, environmental protection, consumption and public services, education and culture, etc. It is thus possible to make well-grounded evaluations and arrive at complex decisions in the field of health, overcoming sectoral boundaries and involving community spheres with an overlapping concern in solution of health problems.

Nevertheless, it must be pointed out that the traditional health information system is not in a condition to satisfy the information needs for management of national health programmes, since it does not reflect the latter's specificity. Apart from common informational characteristics, each national health program features specific indicators and evaluation criteria relating to the particular problems it deals with, the pattern of pathology observed, the different approaches to problem solution. This is the reason why each national health program requires its proper instrument for generating specific information.

Such an approach has been prompted by our experience in the field of providing information for health management. When national health programs were confronted with the information generated by existing information system, certain gaps, appreciable in extent, were disclosed and had to be filled through specialized monitoring.

It thus became evident that there is a need for improving the approaches used in designing national health programs, notably as regards the development of their information systems. One requirement that is critical to such development is a systematic approach based on clearly formulated objectives, desired and expected mid-term targets, and ultimate results of program operation. It will then be possible to explicitly define the information and indicators needed as a basis for analyzing the course of program implementation.

In determining relevant information, it is necessary to consider problem specificity in its multiple aspects: biomedical, sociomedical, sociopsychological, economic, etc. On this basis, it may be proceeded

to definition of information contents and form, and thus to formulation of system input.

Further essential issues to be considered in designing information systems for national health programs include:

- defining information to be generated for the program as a whole and for its parts;

- distinguishing between information on program accomplishments resulting from interactions between its own elements and information about external systems — notably other national programs — producing an impact upon implementation of the program in question (for instance, socioeconomic conditions, shifts in the demographic situations and so on);

- providing for feedback in program management, so as to mark changes occurring in the course of operation as well as problems arising from various external impacts;

- staging the information process in close connection with stage targets and expected results;

- distinguishing between information needs at the various hierarchic levels of program management and operation.

A vital point in designing the information system for a national health program is the development of criteria for assessing indicators that, in themselves, allow no appraisal of progress in implementation of a given programme. When such criteria are to be specified, the approach adopted should encompass the initial state, the possibilities (organization, resources) for promoting the attainment of estimated targets at individual stages of program operation, and the ultimate objective.

A basic requirement in generating information for national health programs is for such information to be accessible, and to allow processing and analysis by available methods. It should be able to clearly translate the evolution occurring in population health and in the activities of health services not only in the negative aspect (as is common practice — presence or absence of disease) but also in the positive aspect (adoption of a healthy style of life, improvement in living conditions, nutrition, occupational regimen, with corresponding impact upon the psychological, intellectual, and physical state of the individual).

Under contemporary conditions, it appears appropriate to design computer-aided information systems based on microcomputers with broad capabilities and developed software. Though our experience in this field is limited, there are some indications that the prospects are promising.

WAYS OF IMPROVEMENT OF THE AMBULATORY CARE OF THE POPULATION IN GDR

R. German, H. Goev (GDR)

The development of the public health services in GDR in the last 10 years to a considerable degree focused the attention on the ambulatory care. Along with the observed certain reduction of the provision of the population with hospital beds (although a great number of the peripheral hospitals were again constructed or repaired) the ensuring with out-patient care increased. This refers to all types of institutions for out-patient care in the urban, as well as in the rural localities.

Most of the physicians, firstly proceeding to work, are the general practitioners, ensuring first medical care. The physicians-specialists, as stomatologists, pediatricians, obstetrician-gynecologists, radiologists and other specialists supplement the activity of the general practitioners in the necessary cases.

Although there are recommendations by the Ministry of Public Health on the development of the system of ambulatory care, which is extensively used, the concrete planning and activity of each complex, including the proportional interaction between the specialists and the different types of institutions must be executed in view of the local conditions, establishing the priority and maximum usage of the territorial resources.

The state character of the public health system and of the economy in the socialist society gives possibility to improve more and more to work of the public health services. In order to confirm is this assertion just and to what extent the general and special tasks could be solved — an evaluation is necessary to be made, including a certain number of special tests and an attempt must be undertaken at as much as possible informative utilization of parameters, characterizing the public health activity.

The following is taken into consideration:

1. Increase of the real effectiveness of the services in which not the number, but the adequacy and the results of the care must be first and foremost.

2. The quality and effectiveness of the diagnostic and therapeutic care must be raised by means of developing and using of standards and by means of performance of respective measures on the improvement of the training of the specialists. In order to evaluate the productivity of the work of the out-patient institutions, periodic investigations on the health status of the population must be carried out with respective analysis of the dynamic changes. A similar experience exists in the field of the program for control of the propagation of hypertension.

3. All, to a high extent, preventive measures must become a leading part in the whole process of out-patient activity. In the process of reorganization of the out-patient care system, the general practitioner could acquire great importance as the most integrated service. At the same time, the obligations and responsibility of the general practitioner must not be uselessly extended and must be balanced with the functions of the physicians-specialists.

4. The survey on the health of children and adolescents must be a leading link in the system of ambulatory-out-patient departmental care. Its diverse components must be distinctly coordinated for enhancement of the over-all effectiveness of the work and establishment of confidence in the relations with the attended population groups.

5. The satisfaction of the increased needs for treatment and rehabilitation must be ensured by all out-patient institutions and specialists of various profiles.

6. The system of in-patient attendance has reached such dimensions and such a degree of diversity, that substantial modification and improvement of the administration system of this service are necessary. This includes coordination of the work of the individual services of the system of ambulatory-out-patient departmental care, as well as improvement of the informative ensuring and strengthening of the relations with the hospital services.

ROLE OF THE BULGARIAN RED CROSS IN THE HEALTH CARE OF THE POPULATION

L. Josifov, S. Krystev (PRB)

The Bulgarian Red Cross, being a voluntary mass organization, and in conformity with the specific character of its activity, is the closest assistant of our socialist health protection.

The work of the Bulgarian Red Cross is mainly in two directions. In the first place it works towards the improvement of the health culture of the population, closely connected with the most topical health problems, mainly in the field of prevention of diseases, formation of the healthy way of living, fight against diseases of social significance, accident prevention, alcohol and tobacco abuse, as well as the protection of the environment. We are aiming at the Red Cross health education, with its contents and forms, to meet to a maximum extent the requirements and interests of the various age and professional groups of the population.

The health education of the schoolchildren of all kinds of schools is put on a broad basis. There is a special programme to prepare young

people for family life. The health education of the population over 18 years of age is carried out in a planned and systematic way.

The Bulgarian Red Cross has a wide Red Cross and health press publicity activity through its "Zdrave" (Health) magazine, and also by means of the press, cinema, television and photography. Every two years an International Festival of Red Cross and Health Films takes place in Varna, with the participation of over 50 countries.

On the basis of the acquired knowledge, the population is involved in wide health amateur activities which are the second direction in the work of the Bulgarian Red Cross. The voluntary Red Cross workers, trained according to a special programme (worked out by the Ministry of Public Health and the Central Committee of the Bulgarian Red Cross) assist some activities of the various sections of the health service. The Red Cross activists in aid of the hygiene-epidemiological service (the so-called public hygiene inspectors) exercise a public control of the established hygiene and anti-epidemic rules and requirements in the establishment of communal servicing (catering, production and children's establishments). The public hygiene inspectors are involved in the nation-wide movement for the sanitation and urbanization of the settlement systems and the protection of environment. Another group of specially trained Red Cross activists help the district physicians and surgeon's assistants in their work in towns and villages. These activists have definite tasks in the field of mother and child health care, care for the schoolchildren and workers, these tasks being connected with carrying out mass prophylactic examinations, immunizations and vaccinations, card-indexing, rehabilitation under home conditions; tracing down children and adults in need of medico-social aid. They also help in spreading health knowledge, in disseminating free blood donation, and the fight against the industrial and occupational diseases.

The Bulgarian Red Cross works actively for the training of the population to render first aid in case of various accidents and diseases. To this end special teams have been formed, such as first aid posts and first aid teams to work in the industrial enterprises, farms, state institutions, as well as along the roads. Specially trained and well equipped Red Cross teams work on a voluntary basis to prevent accidents in water or in the mountains, as well as to give first aid in case of such accidents. The Bulgarian Red Cross plays an important role in organizing and propagating the free blood donation.

SYSTEM OF HEALTH ADMINISTRATION IN THE MONGOLIAN POPULAR REPUBLIC

Sodnompil Tz. (MPR)

The establishment and development of the state system of public health in MPR is one of the remarkable achievements of our people, acquired during the years of popular rule in the social and cultural life of the country.

Thanks to the enormous care of the party and government, in result of the successful solution by the health workers and organs of many important tasks on the further development of health protection, improvement of the methods and forms of organization of the medical attendance of the working people it became possible to increase the effectivity of preventive work, to introduce the scientific-technical achievements in the therapeutic-preventive activity and to consolidate the material basis of health protection.

In our country successfully develop all kinds of medical care to the working people, specialized care is rendered in more than 30 disciplines, including chest surgery, neurosurgery, allergology, endocrinology, nephrology, urology, resuscitation, traumatology. Radio-isotopic, immunologic, biochemical and other complex methods of investigation are being mastered. Use is made of machines for artificial circulation, artificial kidneys, etc.

The health administration in MPR is realized by a system of organs of health administration. The system of health administration is shown in Fig. 1.

The health administration organs on whatever level realize their functions within the frame of the respective territorial organ of state power (Great National Hural, aymaches /urban/ and district hurals of deputies) and under the direction of the superior health administrative organs. On the level of the Somon hural of deputies there is no health administrative organ. The direct administration and organization of health protection of the population in the somons is realized by the respective aymach health administrations.

The territorial health administration organs realize their activity on definite territory, which has administration subordination to the respective organs of the state power. On the other hand, in MPR, as well as in other socialistic countries, there is branch ascending system of health administration. At the basis of the organization structure of health administration are laying 3 levels: republican level of health administration, aymach, city, and in the cities with district division and administration of the health system in the city districts.

The solution of strategic tasks is mainly concentrated on the level of Ministry of Public Health of the MPR. The tactic and operative tasks, according to their complexity and necessary resources, are solved on the level of aymach health administrations within the frame of the health institutions, where there are the respective administrative organs. In the capital Ulan-Bator, the cities of Darhane and Erdenete the health administration is assigned to the city health administrations, while in the districts of Ulan-Bator — to the district departments of health administration of the district hural of deputies. In this connection, the head of the district department at the same time is chief physician of the district united hospital.

All organs of health administration are executive-commanding. This means that the administrative-financial activity of the health organs is subordinated to the executive administrations of the hural of deputies, under the direction of which they realize their host activity, having for it definite powers. In this way, on one hand, being organs of state power, they execute the will of the legislative organ in the figure of the Great National Hural of MPR. On the other hand, the organs of health administration fulfill commanding functions within the administration system, which finds expression in the subordination of the inferior health organs to the superior ones. The administration of the medical activity comes along the line of the Ministry of Public Health.

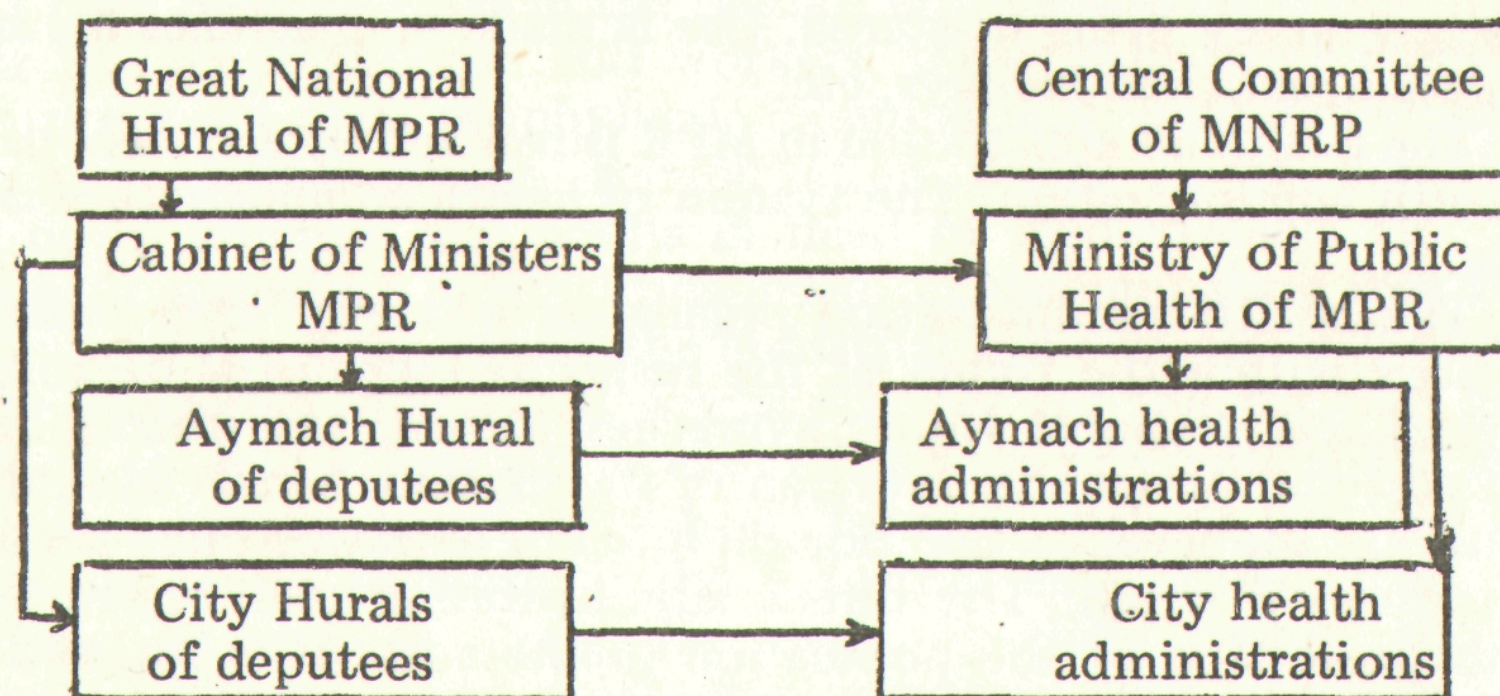


Fig. 1. Scheme of the structure of health administration in MPR

CARDINAL DIRECTIONS IN PLANNING SCIENTIFIC-PRODUCTION ACTIVITIES WITHIN THE MEDICAL ACADEMY SYSTEM

S. Gladilov (PRB)

In a research, teaching, and curative complex of establishments such as the Medical Academy, an economic approach would be inappropriate for a leading role, even though it underlies all of its major undertakings. The guideline of "science — learning — adoption — production", based on BCP and Government resolutions, finds direct application in activities of Medical Academy scientific-production units.

As concerns the Medical Academy system, its 1985 production plan has been fulfilled to 105 percent, amounting to nearly 30 000 thousand leva. As compared with the 1984 record, there has been an increment of 6,123 thousand leva or 25.8 percent. Plan implementation has been associated with reduction in net price by about 5.51 leva per 100 leva production, and in material costs by about 3.10 leva per 100 leva.

Appreciable growth has also occurred in assortments of the drugs, medical commodities, consumption materials, and medical instruments manufactured. The Medical Academy product list includes such items as drugs, biopreparations, eyeglass lenses, artificial joints, disposable syringes, hemodialyzers, ECG one-, three-, and six-channel families, X-ray machines, etc.

This stable and continuous growth is characterized by the following features:

1. High quality, reliability, safety, and complete correspondence to requirements of good medical practice.

2. The entire Medical Academy production is designed to satisfy actual needs of the health service network in drugs, medical commodities and consumption materials. Because of this, it is mostly small-batch, and planned for time intervals conforming to health service needs.

3. Availability of such products eliminates the need for their import from abroad, creating also conditions for export; opportunities thus arise to provide currency for supplying other types of goods necessary to the health services.

4. A key point in price policy for articles manufactured by the Medical Academy to meet health service needs is reduction in net cost by limiting material expenditure and minimizing profit, the latter being governed solely by enterprise funding according to its financial scheme. This is called for the consideration to avoid any encroachment on health establishment budget allotments and transforming this into pro-

fit. At the same time, the products are rendered more competitive on the foreign market. An important role is thereby played by the practice of "provisional prices" which are periodically updated.

5. Adoption of the most recent models, standards, and formulations for the products manufactured, and active monitoring of production effects by leading health research institutes and health establishments throughout the country. Over one single year, 1985, as many as 60 new assortments were introduced, estimated at 3,278 thousand leva.

6. Adjustment of production volume, time terms, and assortments primarily to the needs of the health service network.

These specific features, as well as the requirements of production stabilization and further development, raise certain problems in planning, financing, and control.

In the area of planning and financing, the efforts of Medical Academy planning bodies in creating and stabilizing scientific-production units are focused on manufacturing technology and manpower development.

There are plan provisions establishing the necessary limits and supplies of raw and other materials to ensure that production units operate at a rhythmic pace.

As planned, supply and economy services have been reinforced in organizational and personnel aspects, with most rational utilization of existing reserves.

Prices of basic Medical Academy production items have been worked out and approbated.

In view of rapid realization of finished production, production plans have been coordinated with the needs and purchasing power of health services, and contracts have accordingly been signed. This contributes to the financial stability of individual production facilities.

In compliance with a resolution of the Medical Academy management, conditions have been created for scientific-production units to partly take charge of financing some research projects or other activities of research institutes and teaching departments, insofar as they are of direct relevance to the particular production unit.

Strict control is effected over production volume, quality, and time dead-line.

The aim is to timely and fully meet the needs of health services for instruments, drugs, and medical supplies.

The Medical Academy scientific-production units have thus been performing with positive results from the medical, social, and economic standpoints. Their activities are to be further developed and expanded.

A TECHNIQUE FOR COMBINED QUANTITATIVE EVALUATION OF INDICATORS IN PLANNING AND MONITORING HEALTH AND SOCIAL SECURITY ACTIVITIES

R. Spasov, P. Petkov, I. Bukarev (PRB)

Health care activities, having man for a target, are inherently difficult to evaluate objectively. The health of the individual and of the community as a whole is known to be related to a large number of complex intervening factors of social and biological nature, and to be affected not only by the health system but also, to a varying extent, by the activities of governmental, economic, and societal bodies and organizations.

A technique has been developed to quantify pooled indicators in planning and monitoring the activities of health and social security bodies and establishments. It consists in rational aggregation of indicators to arrive at a complex expression that objectively reflects the degree of task accomplishment and effect in the activities of the structures concerned.

As a prerequisite for applying the technique, quantitative levels have to be set for each indicator. For a regional health organization, these are determined by control figures approbated by the Health Ministry. Quantitative levels for medical services are determined by the regional health department.

The indicators for planning and reporting activities are distributed into five groups by degree of importance, each group being assigned a corresponding weighting factor (wf):

Group I : 1.50 wf	Group III : 1.15 wf	Group V : 1.00 wf
Group II : 1.30 wf	Group IV : 1.05 wf	

The activities of health bodies and services, or of their departments, are expressed as a sum of arbitrary units for each indicators. A 100 percent plan implementation for individual indicators is equated to 10 arbitrary units. Thus, the planned effect (PE) for health-organization or health-service activities will be calculated as the arbitrary units foreseen for 100 percent plan implementation (10 au) multiplied by the sum of products of indicator number of each group and the corresponding weighting factor.

The achieved effect (AE) of activities will be obtained by summing each indicator's arbitrary units.

The degree of plan implementation (DPI) is estimated as the percentage ratio of achieved to planned effect:

$$DPI = \frac{AE}{PE} \cdot 100$$

To illustrate the above by an example, such calculations are shown in the following for a hospital facility of general type (in the town of Chirpan, from 1980 records):

Indicators	Weighting factor	Plan		Record	
1. Amount of patient bed-days	I	116,480	100 percent	116,645	100 percent
2. Amount of patients discharged	I	8,600	100 percent	8,797	102 percent
3. Amount of outpatient attendances	II	189,513	100 percent	208,232	112 percent
4. Amount of preventive examinations for persons exposed to occupational hazards	I	4,130	100 percent	4,137	100 percent
5. Amount of fluorographic examinations	V	—	—	—	—
6. Amount of preventive examinations with cytology test for females	IV	5,500	100 percent	5,985	109 percent
7. Amount of immunized subjects	III	19,456	100 percent	18,951	97 percent

In this case, the planned effect will be given by:

$$PE = 10 (3 \times 1.5 + 1 \times 1.3 + 1 \times 1.1 + 1 \times 1.05) = 80.00 \text{ au,}$$

and the achieved effect by:

$$AE = (10+0) 1.5 + (10+0.4) 1.5 + (10+2.0) 1.3 + (10+0) 1.5 + (10+0.9) 1.05 + (10-0.2) 1.15 = 83.92 \text{ au (arbitrary units)}$$

The degree of plan implementation for the period reported amounts to:

$$DPI = \frac{PE}{AE} = \frac{80.00}{83.92} = 105 \text{ percent.}$$

In this manner, a combined quantitative evaluation may be obtained for the extent to which any health establishment is meeting its indicators, provided the planned effect and the achieved effect include indicators translating actually completed activities.

The technique for combined quantitative evaluation allows additions and modifications to be made not only in terms of indicators and their criteria but also as regards the mode of their appraisal, by using systems of arbitrary units calculated according to the degree to which the tasks entrusted are fulfilled.

ELECTRONIZATION AND AUTOMATION OF PRODUCTION PROCESSES AND ACTIVITIES IN MULTIPROFILE HOSPITAL-AND-POLYCLINIC ESTABLISHMENTS

M. Bozovski (PRB)

The modern integrated hospital is a complex dynamic system that places a number of raised demands on organization and management of activities.

With the advent of scientific-technological progress, the hospital has acquired a large variety of instrumentation used in diagnostic and curative processes; moreover, opportunities are now offered to provide, by means of appropriate computer aid, a complex system of automation for prophylactic, diagnostic-curative, and organizational processes involved in the activities of curative-preventive establishments (CPE).

Adoption of modern computer-aided technology introduces substantial changes into the system of hospital organization and management. A new organizational mechanism for management is arising and asserting itself, implying a new style of work characterized by accuracy, expediency and efficiency of operations.

CPE electronization is a complicated, multifaceted and interdisciplinary process requiring timely and proper solution of a wide range of interconnected problems, including technical, organizational, managerial, informational, programming, staffing, socio-psychological, legal, and other aspects.

In our country, a project entitled "Automated Management System for a Multiprofile Hospital with Polyclinic" is under way. Design and implementation have been entrusted to the Medical Engineering Institute of the Ministry of Machinery Construction, with the Botevgrad District Hospital serving as model facility. According to the adopted conception, development proceeds along two lines:

- local microprocessor (microcomputer) complexes for control of individual technical processes or activities of individual units in the medical services; and

- an all-hospital data bank based on type SM-4 computer.

The microprocessor complexes can function either independently or coupled to the all-hospital informational data bank using an SM-4 minicomputer.

A specialized microprocessor complex (authors: I. Vidodov, A. Pironkov and co-workers) provides continuous dynamic monitoring for patients in intensive care wards, with readouts printed for any desired time period. Through interface with a biomonitor of domestic or foreign manufacture, the complex records a number of vital parameters

such as ECG, pulse and breathing rates, arterial pressure, and is able to recognize an appreciable number of rhythm deviations.

As for the clinical laboratory, we have optioned for a qualitatively new solution, providing collection of assay results. The device being introduced is based on microcomputer "Pravets"; it controls analyzers, plots curves, collects information from analyzers, stores it on floppy disks, and feeds the output to an IZOT-1016-S minicomputer for processing and entering into patient medical records.

These problem-oriented devices and complexes ensure high accuracy of measurements and calculations, spare working hours for qualified medicinal personnel, release from laborious hand work, performing thereby reliability.

Hospital-and-polyclinic establishments are systems with a large resource capacity. There is thus much interest in automating processes of resource management. Use of automated management systems in inpatient departments, paraclinical and household units is highly effective for potent CPEs: bed inoccupancy is reduced, individual patient information expanded, coordination between hospital units improved, equipment utilization raised; and as a result the working hours of medical personnel are better distributed and the quality of activities is improved.

For the efficiency of an all-hospital information system based on type SM-4 minicomputer, advantageous factors include: existence of or a potential for a developed periphery; a large set of communication means, devices functioning in real-time mode and dialogue mode, availability of multichannel systems, the fact that such devices are being manufactured in a number of socialist countries, etc.

Consequently, there is a need for preparing a methodological guide on development and introduction of automated management systems and the hardware required, based on the principles of compatibility, unification and standardization, and cooperativity.

It appears appropriate to stimulate initiatives and expand international collaboration between socialist countries, to establish programme-oriented research-and-development task groups responsible for designing and introducing automated management systems in medical and health establishments, creation of local and regional computer networks in the field of health, and production of computerized devices, complexes and machines with a high level of intellect, reliability, stability, and accuracy in performance.

RESULTS OF THE PREVENTIVE EXAMINATIONS OF FEMALES IN VIEW OF DETECTION OF ONCOLOGIC DISEASES

U. Bosdorf (GDR)

The early detection of gynecologic oncologic diseases — one of the most important preventive trends in the socialistic health protection in GDR.

The high level of development of diagnostics and treatment allows on a scientific basis to preserve female health and to prevent oncologic diseases. Every physician is obliged to include in his activity the prevention of diseases.

On the contemporary stage of development of medicine much attention is drawn on the early recognition and early treatment of cancer diseases. In this connection, it is important to denote three principal aspects of the early cancer detection: hygienic education on the healthy mode of life and self-control; organization of preventive examinations; elaboration in the physicians a careful attitude to the risk factors and systems concerning the oncologic diseases, irrespectively of the cause which induced the patient to refer to the physician.

For detection and prevention of the cancer of the uterine neck in the industrial city of Karl-Marx-Stadt multiple preventive examinations of the females aged 20—60 years were carried out. The preventive examinations were made by gynecologists in out-patient conditions, the results were brought to computer system.

The incidence of changes in the epithelial cells of the uterine neck was established, which amounted to 4.8 percent.

When investigating 11.8 percent of the examined females, additionally were found other diseases of the uterine body, adnexes, parametric structures, Douglas' pouch, mammary gland.

There was detection of the very early stages of the cancer of the uterine neck. In this connection, distinct reduction of the invasive cancer forms was found. This laid emphasis on the importance and significance of the performance of preventive examinations.

The utilization and preparation of the obtained information by the preventive examinations about the oncologic gynecologic diseases in females, its analysis and evaluation by means of medical-statistical methods represents by itself fulfillment of an important objective of WHO. This objective foresees further development of the international system of exchange of medical experience, accumulated in the countries — elaborating the problems of treatment and prevention of the oncologic diseases.

BRIGADE METHOD OF WORK ON THE LEVEL OF PRIMARY MEDICAL-SANITARY CARE AND PREVENTIVE EXAMINATION OF THE POPULATION

O. I. Bratkov (USSR)

In the realization of the strategy, suggested by WHO, during the forthcoming decade, considerable attention is paid to the preventive measures on the level of primary medical-sanitary care (PMSC) in the rural regions and, particularly, to the preventive examinations of the population.

In this respect, one of the effective forms of work organization of the medical personnel, allowing the solution of the tasks of PMSC, an ever greater approval acquires the brigade form, which in conformity with the definition of WHO represents "a method of work for achievement of general objectives, which permit several individuals to use by the best way their qualities by means of unification of their knowledge and experience."

The introduction of the brigade form of work often encounters definite difficulties, determined by the parallelism of the functions, executed by the individual members of the brigade, irregular distribution of the load between them, which in the preventive examinations of the population inevitably lead to decrease of the effectiveness of the brigade work as a whole.

According to our opinion, these difficulties could be overcome by expressing the complex preventive examinations, realized by the brigade of medical personnel, as a multistage working process, the different teams of which are united by a definite consecutiveness and subordination to a single final goal. In this way the results from the examination of the patient on every stage appear as intermediate for the process as a whole, come into consideration at the following stages and exert appreciable influence on its final result, i.e. conclusion on the health conditions of the examined individual.

Formally, such a multistage work process could be dismembered into separate work operations and represented under the form of a sum of working operations, which ought to be executed in a definite consecutiveness for drawing a qualified conclusion on the health conditions of the examined individual. The level of these operations could be different according to the specialists, categories and qualification of the medical personnel, necessary for their execution (i.e. physician's, nurse's, personnel not requiring special knowledge, etc.).

The application of the brigade method of work in the execution of the complex preventive examinations of the population assumes as uniform distribution of the load between the members of the brigade

and ensurance to themselves a regular flow of the individuals submitted to the examination and, therefore, rhythmic involvement of the concrete groups of the population as a whole. Such a distribution could be achieved after establishment of the mean expence of time for the realization of the separate work operation, data for the incidence of the execution of these operations in the examination of the population during a definite period of time (chronometring, photography of the working day) and, afterwards, redistribution of these work operations among the individual members of the brigade in conformity with the level of the work, carried out by them.

The peculiarities of the above-mentioned approach are such, that on its basis could be solved the problems of the rational organization of the labour of the personnel, included into the composition of the brigade, as well as the connected with them problems for determination of the optimal number of the posts of the medical personnel in the composition of the brigade, necessary for ensurance of the concrete volume of work on the annual preventive examinations of the population.

SOME ASPECTS OF THE DEMOGRAPHIC POLICY IN THE EUROPEAN SOCIALISTIC COUNTRIES

E. F. Vartanyan, L. I. Vladimirova, N. N. Stepanova (USSR)

The changes in the conditions of the family in contemporary society has led to the necessity of elaboration of a policy in the field of protection of its health. In WHO activity a special Program for health protection of the family has been determined. At present, WHO affords support to the national programs of family health protection in 90 countries. In the program for family health protection in various countries are reflected those first-line tasks, which definite countries in this field, as well as maternal and child welfare, are planning with respect to the family, nutrition and sanitary enlightenment, etc. These spheres of activity are indivisible component of the program of public health and are closely related to other important elements of the program in the field of primary medical-sanitary care.

Under the conditions of socialistic society, the state character of the problem for family health protection and marriage has acquired a vividly expressed medical-sanitary resonance. The scientifically determined approach to the demographic processes in the socialistic countries successfully stimulate the development of society as a whole. These situations and tendencies have found their reflection into the constitution of the countries, legislation of the marriage and family, laws of the

labour. The accepted imposed legislation stimulates also the magnitude of the number of marriages and childbirths. The extensively presented social facilities — lodging facilities, reduction of the price of the principal products for child nutrition, articles of child clothing, payment during pregnancy and childbirth, possibilities for working during incomplete working day, also stimulated birthrate in the countries during the last decades. In a number of countries the system of facilities for families with children includes reduction of the lodging payment according to the number of children in the family (for example, in CZSSR in the presence of one child in the family the lodging payment is reduced by 5 percent, of two — by 15 percent, of three — by 30 percent, of four and more — by 50 percent); there is a system of transport facilities (children under the age of 10 years pay half rate — in CZSSR, etc.); there are also tax facilities for the families with children. The presence of children in the family bears an influence upon the rate of the pensions for retirement and disability (for every pupil a supplement of 70—190 crowns is monthly due). The retirement age of the women varies between 53 and 57 years according to the number of children brought up.

In USSR, GDR, PRB the system of facilities for the large families has a wide propagation. Thus, in GDR families with 4 and more children have the right to receive dotations for the lodging payment, the large families are helped in providing of furniture, household objects. Families, having several children, have the right to purchase at credit industrial goods, as the families with five and more children are freed from the percentage in using credit. During temporary working disability (occupational injuries) a 10 percent supplement to the payment is established for every child up to 15 years (students — up to 19 years).

The demographic policy in GDR includes measures, stimulating entering into marriage. For the contracting marriage the income tax is reduced. The rate of taxes is also modified according to the number of children (by five children no tax is imposed).

The existing system of payment in the countries creates favourable conditions in the sense that in the first years after the birth of the child the mean income of the family is not reduced when the wife-mother temporarily leaves from work. According to the demographic data of CZSSR*, 50 percent of the increase in birthrate, which was observed in the first half of the 70s years, could be considered to a definite extent as a result of the effect of family assistance.

*Population of the countries in the world. Manual. M. Statistica, 1984, 193 p.

The public opinion in the European socialistic countries aims at the magnitude of birthrates, which finds its expression in the systemic execution of measures in the interest of the population growth, including the creation of special demographic commissions, committees on family planning, special consultative councils on the problems of maternal and paternal education.

In the countries particular importance is attached to the means of mass information with the use of the radio and television for propagation of the ideas of population growth, the problems of the family and children education are discussed on the pages of the periodic editions.

Particular role for consolidation of the family relations is played by the marital welfare centers, managed by specialists: sociologists, lawyers, gynecologists, sexologists, pedagogues, household specialists, etc.

In a number of countries, the demographic policy concerns also the legislation of marriage and divorce. Thus, for example, in SRR the divorce in the marital couples with children up to 16 years is rendered difficult. The divorce procedure lasts 6 months for the childless and one year — for the spouses with children.

In the socialistic society family planning is exclusively dictated by human trends, based on the unity of the public and individual interests. As is seen by the analysis, family planning in the European socialistic countries is included in the system of maternal and child care. The marriage-sexologic consultation centers, created in a number of countries, which are special consultative organs of public health, are aimed at the increase of birthrate. In the countries scientific research centers on the problems of family planning have been created, as well as scientific societies on a large scale.

The developed socialistic society creates premises for all-round development of the personality, harmonic and happy family life, and the measures of the medical-social plan are one of the principal in the deed of social development of the team and of the society as a whole. The formed "demographic" conscience of the family under the conditions of the developed socialism — one of the components of the formation of healthy mode of life, constituent part of the socialistic mode of life.

OUR APPROACHES TO PRIMARY HEALTH CARE

R. Bozhovich, R. Orlovich, V. Stefanovski (SFRY)

The numerous misunderstandings and disagreements that arose around the concept and content of primary health care are disappear-

ing, being gradually reduced to theoretical discussions or differences in shades of meaning. It would not be an overstatement to say that the notion of primary health care (PHC) originated from Yugoslavian practice. The rationale underlying our health-house, based on the teaching and practice of Andrej Shtanpar, is in very close analogy to PHC as conceived today. It has never been insisted, however, that PHC should be regarded as a strictly unified model and dogma for all the existing variety of conditions and levels of development. Yugoslavian PHC experience is among the pioneering, but cannot be held to represent a final state.

Scientific papers make a distinction between the term "primary medical protection" and the concept of "primary health protection". The point is not in a merely terminological difference. PHC is conceived more broadly. It also covers nonmedical factors influencing health protection. However, we cannot subscribe to some opinions according to which PHC as ideology and philosophy is oriented to developing regions and countries and that it consists in a rudimentary level of population health protection.

In the circumstances of excessive rise in health costs, systems throughout the world are facing the problem of assigning priorities to actions aimed at protecting population health. Of course, due consideration being given to differences in existing specific conditions and achievements, we do not think it appropriate to set up a unique and generally accepted, hence dogmatic, model of PHC.

The strategy of WHO toward attaining health for all, as a fundamental right of man, can be realistically ensured only by way of providing PHC. This conception is of utmost importance as it is capable of carrying into effect the humanistic slogan and reducing the disparity between declared intentions and reality (of 80 million born annually across the world, only 10 percent are immunized). It is disconcerting to realize that, as shown by estimates, no more than 1 percent of armament expenditures would suffice to create conditions ensuring adequate health care for all people in the world.

Analyzers of health costs commonly ascribe to health care four "mortal sins":

1. targeting at urban populations;
2. emphasis on curative aspects in matters of health and disease;
3. centering on hospitals (which usurp the lion's part in tools and specialists);
4. centering on medics (underestimation of contributions and influence of nonmedical manpower and their development for health protection).

PHC is the only antithesis and, under existing relations, the only alternative capable of re-orienting health care and making it effective, rational and beneficial to the whole community.

Schematically, PHC may be characterized by the following specific features:

1. it is organized at local level;
2. participation is not limited to health workers, it is open to all factors;
3. dominant influence is exerted by providers and by users of health services;
4. in nature, it is comprehensive health care;
5. health improvement impacts are produced predominantly at local level;
6. the local community is the constant site of contacts between health care and the population;
7. PHC is an integral part of the health care system, it is the driving force of this system and, at the same time, an integral part of social and economic development.

Though disagreements exist, PHC is expressed in a program including the following activities and measures:

1. measures to improve nutrition and ensure quality drinking water;
2. measures to improve basic sanitation, living and working conditions;
3. maternity and child health protection, including family planning;
4. immunization against communicable diseases;
5. prevention and control of locally endemic diseases;
6. education of the community with regard to health behavior and joint decisions on common problems;
7. treatment of certain diseases and injuries;
8. supply of essential drugs.

Our type of health-house exceeds in its functions this minimum program for PHC. A health-house meet 85 percent of the health needs at community level. Therefore, our practice is in compliance with WHO principles according to which PHC should be organized and maintained as the major component of the health system.

The health-house is multifaceted health establishment delivering outpatient forms of care and using dispensary methods of work. Its responsibilities in the health area are as follows:

- surveillance and study of population health status, environmental health conditions, living and working conditions;
- undertaking measures aimed at protecting the health of the population, in particular of women, pregnant women, infants, children of preschool and school age, adolescents, and workers;
- undertaking measures aimed at prevention, eradication, early diagnosis and treatment of infectious diseases and other prevailing conditions and injuries;

- provision of visiting services and organization of health education;
- delivery of curative and rehabilitative care to the sick and injured, at the establishment and at their homes;
- undertaking measures to prevent and treat diseases of the oral cavity and teeth;
- carrying out disinfections and disinsections.

For implementation of tasks pertaining to population health improvement and protection, socio-political bodies at all levels lean upon the work of the health-house and other health establishments, as well as on support from community and professional agencies and organizations, and on citizen initiatives.

In this manner, the health-house is ensuring the unity of preventive and curative medicine, and population health has become the concern of society as a whole through active involvement in promotive actions of all its sectors.

DONORSHIP AUTOMATION ON THE BASIS OF A MICROCOMPUTER SYSTEM

N. Vassilev, V. Vassilev (PRB)

Due to the contemporary advancement of computer technology it becomes possible to introduce automated management systems in all the spheres of socioeconomic life and to improve them.

The role of microcomputers in public health becomes more and more comprehensive as well.

The achievements of the People's Republic of Bulgaria in microcomputer technology are a real prerequisite to the improvement of the existing system for donorship automation.

The authors analyze thoroughly the basic stages of donorship organization and trace out the way to their overall automation by making use of the personal microcomputer Pravets-82 — produced in Bulgaria.

The advantages of the use of microcomputers in automated systems are put forth.

ROLE OF THE SANATORIUMS IN REALIZATION OF REHABILITATION MEASURES IN CARDIO-VASCULAR DISEASES

V. K. Vakulin (USSR)

Despite the multiform preventive measures of the public health organs, in the general structure of the population morbidity in our country the first place is still occupied by the pathologic processes of the cardio-vascular system. Not accidentally, from 60 percent to 80 percent are occupied by the patients with these nosologic forms of disease. It has to be mentioned that with every year the number of the patients of the young age groups increases. Judging by the data of home and foreign authors, the seize of morbidity is determined by the avalanche of informative and emotional overloading, hypoxia and adynamia, side by side with other not less important factors as non-rational nutrition, smoking, associated or preceeding diseases; influence of particular factors of environment, etc.

In the last years, in view of increasing the effectiveness of treatment of this large group of patients and reduction the number of the most threatening complications — ischaemic heart disease, infarctions, a three-stage method of treatment is used on the principle "out-patient department — hospital — sanatorium", or two-stage "out-patient department — sanatorium". In this respect it is necessary to preserve the fundamental principles of rehabilitation, which derive from the unity of the methods of control, individual selection of the schedule of adequate treatment (directed towards elimination of the disease or maintenance), methodical and tactical unity on all stages.

Of uttermost importance is that the whole information on the clinical-functional conditions of the patient, the reports of the clinical-instrumental and laboratory investigations, the assessment of the working capacity and degree of training, the recommendation for the next stages of rehabilitation to become known by the physician of every establishment. For this purpose special rehabilitation cards have been elaborated.

The sanatoriums occupy an important place in the prevention, treatment and rehabilitation of the patients with cardio-vascular diseases, the role of which is determined by the appropriate selection of the necessary natural and therapeutical factors, the physical training and balneologic procedures and other therapeutic measures. Nevertheless, the determination of the individual complex schedule of treatment, applicable to every concrete patient, is a complex deed and depends not only on the physician's experience, but also on the sufficiently detailed drawing up of the rehabilitation card on the pre-

ceeding stages of treatment. Deriving from this information, the treatment program could be quickly worked out. The latter to a considerable degree differs from one another by the extent of the curative measures, as well as of the functional possibilities of the patient.

The introduction of the three-stage treatment ensures possibility to send back most of the patients, having suffered from myocardial infarction, to work (80.7 percent of the cases), to transfer to disability not a considerable part of the patients (7.8 percent), 11.5 percent of the patients (about 50 individuals) deceased, mainly because of various associated and aggravating their conditions diseases (diabetes, thrombo-embolism of various localization, acute lung oedema, etc.). Most stable remote results of the sanitary-resort treatment were obtained in the group of patients with stages I and II of hypertensive disease. According to the data of the rehabilitation offices, in the majority of patients the arterial blood pressure fell down up to normal values. Nevertheless, even after 3—4 months in part of them (for example in 20—25 percent of the cases) the arterial blood pressure once more raised. For this reason, to such patients, besides the strict check-up of their health conditions, a so-called maintenance therapy must be prescribed under out-patient departmental conditions according to the effectiveness and tolerance of one or another medicinal preparation.

In this way, our proper experience and literature data draw to the conclusion that the stage method of treatment is of great importance in the rehabilitation of patients, affected by cardio-vascular diseases. We recommend the use of special rehabilitation cards, which must reflect the reports of every method of clinical-instrumental and other kind of investigations, the utilized medicinal preparations, the degree of their tolerance, effectiveness of action, as well as evaluation of the physical and functional activity. They ensure a high degree of continuity and adequacy of the therapy, determination of the necessity of repeated hospital or sanatorial treatment. The principal efforts must be also directed towards removal of the risk factors (overeating, smoking, stress situations), treatment of the associated diseases. Only under these conditions could be ensured prophylaxis and prevention of the relapses, adequate treatment, as well as return of the patients, affected by cardio-vascular disease, to work.

ELABORATION OF MULTIFACTORIAL MATHEMATICAL MODEL FOR FORMATION OF GROUPS OF INDIVIDUALS WITH INCREASED RISK

G. Gachev (PRB)

The cerebral apoplexy is one of the most frequent cause of morbidity and mortality in the population of the majority of the developed countries in the world. Therefore, the study of the factors, which influence the development or induce it directly, is of decisive importance for its prevention.

It is known that among the factors, which contribute to the occurrence of many diseases, including cerebral apoplexy, as a separate group are brought together the social-hygienic factors. Many of them do not exert a direct effect on the development of diseases, but they frequently contribute to the revelation of the remaining factors and could reinforce their negative influence.

The existing literature data on the significance of the above-mentioned factors for the occurrence of cerebral apoplexia are very incomplete.

Deriving from the collected by us data on the main social-hygienic factors which are of significance for the development of cerebral apoplexia and by using a special machine program in their processing, we obtained a multifactorial model, which allows to detect the individuals predisposed to occurrence of this disease.

The applied by us algorythmic complex "Summarized portrait" belongs to the group of the so-called methods of image recognition. It is elaborated in the Institute of Administration Problems at the Academy of Sciences of USSR and is realized in the Oncologic Scientific Center at the Academy of Medical Sciences of USSR with the performance of a number of oncologic-epidemiologic investigations. Good results were also obtained in its using for establishment of the factors, leading to the development of some cardio-vascular diseases.

Our study was carried out on two groups of examined individuals, involving 200 persons each. The first test group consisted of patients with cerebral apoplexia, while the second (control) group — of individuals without signs of disturbed cerebral circulation. Both groups of examined individuals were standardized according to age, sex, residence and professional activity. The data for every individual were collected by means of direct inquiry. The formed mass of observations was divided into two parts — one for the building of the model (instructive selection) and the other for checking of its accuracy (examining selection).

On the basis of studying the informative value of each of the investigated by us factors and its influence upon the accuracy of the model, among the initial 55 factors were selected 26 most substantial.

The practical significance of the work consists in the elaboration of a valuable table, which contains the designation of the separate factors and their gradation, as well as the obtained in result of the processing weight coefficients of every gradation and the so-called machine threshold significance. The table serves for detection of individuals, predisposed to suffering from cerebral apoplexia. For this purpose, after the direct questioning of the concrete examined individual it is necessary to sum up the weight coefficients of the gradation, corresponding to his answer on every factor, and in the case, if the sum is superior to the mentioned machine threshold, the individual ought to be referred to the group with increased risk.

According to the existing criteria, the obtained by us accuracy of the table could be appreciated as satisfactory.

The table is designed for use by the physicians of the practical public health in formation of the contingent of individuals subjected to active out-patient follow-up. It is also appropriate for introduction in computers and in this case the collected individual data could be stored in machine memory and used in the constitution of the registers of the health status and mode of life of the population in a definite region.

ORAL HEALTH SURVEY IN AN AGRICULTURAL COOPERATIVE

E. H. Hoef, K. Lehmann, E. Rupp (GDR)

In socialistic society, increased concern with man's health and preventive orientation of health care have resulted in closer attention being given to conditions that usually involve no immediate threat to life and rarely cause appreciable disability. To such conditions belong diseases of the oral cavity, teeth, and gums. Specialists in social hygiene are interested in them not only by virtue of their long-known potential to affect systemic health, but also because their prevalence may serve to draw general conclusions on the extent to which people are aware of health implications with regard to themselves.

To date, this phenomenon has only been studied occasionally in the GDR. Hence, included in longitudinal epidemiologic studies currently under way were in-depth investigations of major chronic diseases of the teeth and gums, as well as of the regularity and effectiveness of personal oral hygienic practice. Using a number of indexes

obtained from clinical examinations and interviews, stomatologic pathology was studied in a total of 726 members of an agricultural cooperative, ranging in age from 18 to 65 years (408 males and 318 females) and distributed by age and occupation.

Frequency of dental caries revealed its high prevalence and large age differences. Females, with a higher frequency, showed at the same time a markedly superior extent of cures than males. As for caries frequency by occupations, particularly prominent were groups engaged in plant cultivation and animal rearing. A large proportion of dental lesions was covered by the parodontopathy index, with regard to various components (inflammation, depth, dystrophy). It finally appeared that healthy teeth were present in no more than 16.7 percent of the subjects examined (9.9 percent of the males and 25.2 percent of the females). Changes were more frequent and more pronounced within the age bracket 45—55 years. Periodontal changes were noted to increase in frequency with advance in age. The frequency distribution of parodontopathies by occupational (agricultural) groups showed differences, with frequency and severity of dental affections higher in workers employed on less qualified jobs. For instance, of the females employed in management or administration services 46 percent were periodontally healthy against 14.8 percent of females employed in animal rearing.

There was a definite relationship between dental care habits and parodontopathies. Of the subjects daily cleaning their teeth 20.3 percent were seen to have healthy gums against merely 4.4 percent of those not cleaning their teeth. It should be noted in this connection that hygienic discipline was less common among males, this fact being clearly translated in oral pathology. Supporting evidence was obtained from a comparison of dental deposit frequency distribution when subjects were grouped by personal oral hygiene habits.

As shown by our results, despite progress in the field of oral health, this is still an important issue in health policy. Coping with the situation calls in the first place for preventive measures.

The evidence obtained leads us to assume that oral health and oral hygiene may provide relatively good indicators in assessments of general behavior and attitudes with regard to one's health.

USE OF MICROCOMPUTERS FOR MACHINE DIAGNOSTICS

B. Djongolska (PRB)

The modern microcomputers help the physicians in the solution of complex differential-diagnostic, prognostic and therapeutic tasks.

At present large experience on the use of microcomputers in medical practice in the different countries has been accumulated. In our country the following microcomputers are widely spread:

- ISOT 1002 C — with internal memory of 32 KB with two floppydisc memorizing devices, using flexible magnetic discs, monitor and printing device;

- "PRAVETS-82" — with internal memory of 64 KB, with possibilities for switching on up to 14 FDD, using flexible magnetic discs with a volume of 140 KB, monitor and printing device;

- ISOT-1031 C — with internal memory of 64 KB and the same configuration as "PRAVETS-82"

On the basis of the utilization of these computers in many district cities in Bulgaria are created and function successfully the following nosometric systems:

- MIDIDA — for analysis of the information value of the medical scientific data. The structural distribution of the memory allows to work with practically unlimited volume of data.

- SIGENOSA P1 — for processing and exploitation of diagnostic systems.

- SINONEZA — for diagnostics of the principal neurologic diseases: strokes, tumours of the cerebrum, spinal cord, inborn diseases of the nervous system, idiotic conditions and spinal cord injuries. Every module of it includes several subsystems, solving different differential-diagnostic problems.

- SINOPEZA — for diagnostics of the diseases of the peripheral nervous system. It contains 6 modules — one for prognosis of radiculitis occurrence, three for solution of particular differential-diagnostic problems and two for rarely encountered diseases of the peripheral nervous system.

- SINODENA — for diagnostics of children neuroses.

- UAVA-3 — for diagnostics of the transition to malignancy of peptic ulcers.

- NODEGOSA — for diagnostics of children speech disturbances.

- SINIMA — for diagnostics and prognosis of acute myocardial infarction, evaluation of the possible schemes of treatment.

- SINOSHIZA — for diagnostics of schizophrenia and similar conditions.

At the creation of these systems and their application in practice wide use was made of the apparatus for algorithmic ensurance, presented in the works of R.M.Bihovski, E.V.Gubler and N.S.Misuk and collaborators.

The Bulgarian diagnostic systems possess all qualities of contemporary nosometrics: high reliability, dialogue regimen of work, implication of all aspects of the therapeutic-diagnostic process, etc.

The wide development of the personal microcomputers in health protection discloses great possibilities for their practical use in the physician offices, laboratories, surgical theatres, etc.

HEALTH CONDITIONS OF THE RISK GROUPS OF WORKERS IN THE TEXTILE INDUSTRY IN THE CITY OF GABROVO

V. Dimitrov (PRB)

The textile industry, including the whole production on the processing of fibrous material, occupies one of the first places among all industrial branches with respect to the number of engaged workers. Taking into consideration that the main part of these workers are females, of primary importance are the problems related to the work, mode of life and health of the females.

In connection with the modernization and intensification of the industrial processes, new occupational risk factors occur at the working place, which determine the specificity of the level and structure of the morbidity with temporary loss of working ability and of occupational diseases. Important problems of the health conditions of the workers with basic professions (spinners and weavers) in the two different textile combines for production of cotton-synthetic and woolen tissues. These professions are associated with risk factors, to the number of which refers the level of occupational noise (up to 106 dB). This represents an occupational premise for frequently established disturbances of the hearing analyzer. The vibration together with overstrain of the locomotor apparatus determine the fundamental hygienic problem. The manipulation of small duration and frequently repeated, the itinerant manner of operating the machines (daily the workers pass over up to 12 km), the psycho-sensorial tension lead to overwork, and later on to the occurrence of occupational diseases, most often vegetative polyneuropathy. According to WHO classification of the occupational diseases, these diseases refer to the group, having pronounced occupational character. There is also dust harmfulness (textile dust). The comparison of the occupational noxiousnesses allows to clarify, that surpassed hygienic norms prevail in the cotton-synthetic combine.

For the five-year period (1979—1983) the indices of morbidity with temporary loss of working ability and of the occupational diseases among the spinners and weavers, engaged in both combines, were analyzed. The intensive indices (incidence, severity to 100 workers), when compared with analogous indices for the whole district, were considerably higher. "Problem" diseases for the textile workers, leading frequently in both combines to loss of working ability, represented: acute catarrhs of the upper respiratory tracts, diseases of the locomotor apparatus, household injuries, etc. The indices "incidence of cases" and "days of working disability" were relatively high in the cotton-synthetic combine.

Of all established occupational diseases during the period of study, more than 75 percent were related to the risks of both professions. In weavers predominated the impairment of the auditory nerve, while in spinners — the vegetative polyneuropathy.

Conclusions and suggestions on improvement of the organization of work and of medical care in view of optimization of the system "textile worker — machine — environment" and reduction of the morbidity with temporary loss of working ability and of occupational morbidity, reinforcement of the health of the workers, engaged in textile industry, were adopted by the management of the combines and from now on are in process of introduction.

ANALYSIS OF THE MORBIDITY IN MULTI-SHIFT WORKERS AS COMPARED WITH ONE-SHIFT WORKERS

U. Deling (GDR)

Multi-shift work is ever more applied in all industrially developed countries. For example in 1984 35 percent of all workers in GDR were engaged on 3 shifts.

The shift work is characterized by desynchronization of the physiologic functions in the daily life cycle. According to data of the literature, the shift work exerts influence upon the morbidity.

We carried out analysis of the morbidity in 46 enterprises of textile industry in Karl-Marx-Stadt district according to the sick-leave forms.

The following results were disclosed:

— Highest morbidity on the basis of age-standardized rate in the population working on two shifts;

— When the morbidity was observed according to age groups, relatively low morbidity was established in female workers younger than 25 years;

— The morbidity in two-shift system in all adult groups lesser by continuous work on shifts;

— In three-shift workers morbidity increases with long-term work on shifts, as well as with the level of family load up;

— No statistically reliable differences were established with respect to the duration of working disability due to diseases between the various shift systems;

— By long-term work on three shifts individuals younger than 25 years are prone to suffering from diseases of the nervous system, gastro-intestinal tract and cardio-vascular system.

Conclusions:

— The workers, engaged on shifts, must be submitted to regular medical supervision;

— In cases of unusual results, special medical examinations must be performed;

— After transition to shift work, the check examinations must be carried out every two years;

— There is need of specially qualified physicians;

— By means of corresponding programs, instructive work must be carried out among the shift workers about the influence of shift work upon health;

— Of great importance are the problems of sleep and regular nourishment.

ON THE SYSTEM OF STUDY OF THE MORBIDITY WITH TEMPORARY LOSS OF WORKING ABILITY IN PRB

K. Kiryakov, N. Tsacheva
(PRB)

The problem of study of the morbidity with temporary loss of working ability exists since the occurrence of the necessity for conduction of current observations on the health conditions of the workers. Despite the great remoteness in time, it is not definitively solved in scientific, methodical and organisational plan.

In our country since the beginning of the century through the medium of social security single attempts were made at investigation of the health conditions of the workers, leaving of work by sickness.

After the Ninth September 1944 substantial changes occurred in this sense. The registration-account forms were gradually enriched according to the rubrics of the Soviet and later on of the international classification of diseases. In 1971 the account form D00-I was approved. By means of it a relatively reliable and complete statistical information was ensured on the level and structure of the cases and days of temporary working disability of workers.

Differentiated observations are also carried out on the morbidity with temporary working disability among agricultural workers-cooperators, ensuring rights for social security to the agricultural workers-cooperators.

In 1975 considerable changes occurred in the involvement of the observed contingents. The agricultural workers were embraced together with the industrial workers, while the enterprises in which less than 200 persons were engaged fell out of account. In relation with this, differences between next years were observed with respect to the reduction of the rate of the cases (12.17 points), as well as with the days (71.64 points). These disturbed the continuity and created premises for methodical inconsistency. The production of the five-day working week became a cause for disturbance of the unified current observation.

With the introduction of the scientific-technical progress in the field of information, respectively of the automatic systems for information and management of morbidity with temporary loss of working ability in our country in 1980—82, on regional levels were created new conditions, corresponding to the modern technical requirements. In this period reduction in the rate of the cases to 4.39 points and of the days to 34.25 points was observed. By principle, the basal registration document was changed, based not on the paid, but on the issued sick-leave forms. A main defect appears in the use of copies of the issued sick-leave forms (their second specimen), which on its part becomes premise for a number of other substantial errors, particularly inexactnesses in the account, etc.).

On the basis of our systematic long-year investigations of the morbidity with temporary loss of working ability the following principal defects have been clarified:

1. Disturbances of the unity and embrace of the sum of primary information are allowed.

2. The basal registration document (copies of the issued sick-leave forms are used instead of the paid ones) has been changed.

3. The study of the morbidity with temporary loss of working ability is not ensured to be carried out on the number of the sick individuals and respectively to define the groups of frequently and long-time suffering individuals.

On the basis of all this, we suggest revision, precision and perfection of the system of study of the morbidity with temporary loss of working ability by means of:

1. The account of all cases of working inability to be made out of the number of the workers.

2. The basic units for observations must be considered the suffering individuals.

3. Improvement of the tabulogram pattern in view of achievement of better information.

4. Ensurance of information also about the non-suffering individuals and their passport-professional characteristics in view of elucidation the significance of the health factors under the conditions of work and mode of life.

ON THE INTEGRATED PROGRAM OF PREVENTION OF CARDIO-VASCULAR DISEASES

A. E. Lapin, U. A. Rostokin (USSR)

It is known that the prophylaxis of cardio-vascular diseases, oriented towards prevention and struggle with the principal risk factors, bears an interdisciplinary character. All this allows to determine this activity as integrated prevention of the main non-infectious diseases (IPND). Owing to the interdisciplinary character of this problem and its social significance, the role and degree of participation of the physicians with wide profile and health administrators in IPND are enhanced. The practice of a similar preventive approach — it is one of the real ways to the solution of the global strategy of WHO — “Health for all up to the year 2000”. In recent years WHO in its programmed activity for prevention and struggle with the non-infectious diseases has designated an important place to primary prevention.

In the elaborated by us methods, an important component was the system for evaluation of the health and risk factors, composed of four groups, within the scope of which each one of the recorded parameters was assessed: arterial blood pressure, cholesterol and blood sugar levels, smoking, body mass, physical activity (quantitative test), veloergometric test, ECG. The first two groups of this system represented by themselves normal meaning, i.e. group I — as “optimum”, group II — as “border-line”. The third and fourth groups — the risk significance, differing by the degree of intensity. Such a system allowed to evaluate not only the degree of risk, but also the level of health according to each parameter, as well as calculations with the use of computers of the integral values, as the health index and appraisal of

the results derived from the program of prevention according to objective data.

Important objective of prevention was the substantial and considerable reduction of the propagation and intensity of the principal risk factors in the group of individuals with increased risk. In males aged 49–59 years every 12 and 24 months analysis was made of the preventive measures, carried out. In individuals with arterial hypertension the mean level of systolic arterial pressure considerably decreased from the initial values: after sanatorial treatment — by 18%, after 12 months — by 9–12%, after 24 months — by 6–10%. The mentioned data speak in favour of the high effectiveness of the program for struggle with these risk factors. Positive results were also obtained with respect to other risk factors.

On the initial stage, the program of prevention involved individuals, referred to the groups with high risk, as well as who had a good psychological readiness for preventive measures. But during the last years, from the strategy of "high risk" we passed over to the strategy of "population prophylaxis". In the population approach, the physician had to do with patients with equal level of psychological disposition and behavioral attitude to the program of prevention, which made necessary to classify these groups in three categories: with "negative" attitude (refusal from changes in behaviour) and with "positive" attitude. For the "negative" the program of prevention consisted in group and individual enlightenment work in view of creating arousing interest and increase of the information of these individuals, for the individuals with "poor" attitude the so-called program of struggle "by small steps" was suggested and psychological support was ensured, for the "positive", as earlier, a purposeful struggle with the present risk factors was conducted or a general program of health reinforcement. The preventive measures were practically undertaken for all patients, irrespective of their age, composition and health conditions and namely this contributed to the successful development of the program aimed at fulfilment of the assumed tasks on the optimum improvement of the health conditions of the studied groups of patients.

PREVENTION AND EARLY TREATMENT AS BASIS OF THE NATIONAL PROGRAM FOR HYGIENE OF THE BUCCAL CAVITY

K. Lautschmann (GDR)

The 32th session of the World Health Assembly in 1979 approved the global strategy of "Health for all up to the year 2000".

In view of relieving the activity of the states — members on fulfillment of the global strategy, later on indicators were elaborated, included such in the field of hygiene of the buccal cavity.

At present, no one country is in state to satisfy completely the requirements of the population in stomatologic care, if the solution of this social-hygienic problem is not realized in unity with the prophylactic and curative-rehabilitative measures. According to WHO data in a number of industrially developed countries there are important signs of reduction of tooth caries, which is achieved by considerable capital investments and increased consciousness of the population.

GDR fully supports the objectives of the global strategy of WHO, including that in the field of hygiene of the buccal cavity. A number of recently issued directions, instructions and decisions as for example "Instruction for survey of the health of children and adolescents" and "Instruction for regular stomatologic attendance of children and adolescents" in 1979 not only emphasize the high level of medical and social insurance of the population, but also exert a direct influence upon the national strategy in the stomatologic care.

The traditional concept of stomatologic care needs principal modifications, since taking into consideration such criteria of appraisal as effectivity, benefit and appropriateness does not respond to the global strategy of WHO. For modification of the presently existing practice a considerable reduction of the expenses is necessary, directing the main efforts to prevention and early treatment.

The adopted strategy in GDR fully corresponds to these requirements.

ON THE PROBLEM OF IMPROVING THE ORGANIZATION OF PEDIATRIC STATIONARY CARE DELIVERY UNDER DOMICILIARY CONDITIONS

L. Kaseva, L. Malenov (PRB)

In the P. R. of Bulgaria, as in other economically developed countries, treatment of bed-ridden children in their homes is a fairly widespread form of medical care delivery allowing, on the one hand, to extend qualified care to a larger number of patients in need of systematic medical surveillance and, on the other hand, to utilize more rationally available hospital beds by reserving them for cases whose management requires hospitalization. The lately growing trend to expand home stationary care relates to medico-social, psychological, and economic factors.

Described in this communication are the provisions of a scheme designed to improve organization of home stationary care for children. Development of the scheme was based on major conclusions from a 1978 survey of organization, extent, and nature of medical care delivered at home to children aged up to 14 years; this was supplemented by the findings from two concurrent studies (in 1982) comparing information on pediatric stationary care delivered at home or in the hospital department, such information being collected by the methods of expert evaluation and enquiry.

The improvement scheme centers around the basic triangle: (1) the health system with its element — the pediatric department of a polyclinic, (2) the local area pediatrician, and (3) the sick child and its family.

In order to further improve the organization and quality of home stationary care, a number of conditions and prerequisites have to be fulfilled by the health system. Such, for instance, are the following: further reduction in the area covered by one pediatrician; gradual transition to drug treatment free of charge for all children receiving ambulatory care; further improvement in medical instrumentation, including development of reliable tests for emergency diagnosis, supply of laboratory sets, portable X-ray, ECG and physiotherapy equipment; provision of the necessary financial resources; improving the performance of manipulation units (to raise throughout capacity for prescribed procedures); rational utilization of available transportation means, etc.

Local-area pediatricians and nurses have to be appropriately qualified (specialty experience of at least three years), with emphasis on knowledge in the area of medical psychology and pedagogics, and should have acquired the necessary authority among the community served.

The active element of the triangle considered is the local-area physician who is responsible for the organization, management and provision of treatment. In each specific case, he makes the important decision as to the site of care delivery, at home or hospital. The importance of clinical and organizational experience in decision-making is stressed, if unwarranted hospitalizations are to be avoided.

Communications of the local pediatrician with the child's mother and other family members will guide his further behavior. Points to be considered are parental consent, or otherwise, to home stationary treatment, sufficiently good housing conditions, the possibility to ensure nursing. Decisive factors are the nature of the disease, the child's age, the degree of change in his general condition; recognition of the need for intensive care decides for the hospital, since such care cannot be delivered at the home.

Basic functions and tasks in organizing home stationary care delivery are identified for the local-area pediatrician, the nurses, and the head of the pediatric department in the polyclinic.

The scheme that has been worked out is only an attempt to represent by means of a systems approach the wide range of intricate and interrelated conditions that have to be met in order to provide a more rational organization of pediatric stationary care under domiciliary conditions at the present stage of development.

TOWARDS OPTIMIZED UTILIZATION OF AVAILABLE HOSPITAL BEDS

B. Kitov (PRB)

Among problems relating to intensification of health activities, one key issue is rational utilization of available beds in hospitals of general type. This is readily conceivable if one considers that above half of the health budget is expended on inpatient care.

Available hospital beds may be held to be rationally utilized when optimal levels are achieved in basic indicators of normative bed occupancy, with high bed turnover, and justifiable and adequate hospitalization. A skewed appraisal of bed utilization using occupancy as the sole criterion may favor a propensity to prolonged hospital stay, unwarranted hospitalization, and admission to specialized high-cost centers of some patients that could just as successfully be treated at less expensive hospital departments.

It appears reasonable to inquire into possible reserves for improving utilization of available hospital beds by reducing the amount of unwarranted hospitalizations at specialized centers.

In 1978–1979, we conducted a survey of inpatient morbidity at five regional hospitals across the country (cities of Blagoevgrad, Vidin, Gabrovo, Pazardzhik, and Yambol). A total of 8953 discharges were covered. Using the method of expert assessment by relevant specialists — clinicians with organizational experience, employed at Sofia Medical Academy facilities — it was disclosed that these hospitals of regional level did have cases of unwarranted admissions. Moreover, such cases did not exclude even the most socially important and highly prevailing conditions. On the average for the five medical establishments indicated, the distribution of these cases by disease (ICD–9) was as follows: complications of pregnancy, childbirth, and puerperium, 9.24 %; respiratory disorders, 40.77 %; disorders of the nervous system and

sensory organs, 15.39 %; of the digestive system, 17.49 %; of the genitourinary system, 11.29 %. Some cases of unwarranted admissions belonged to the other disease classes.

As pointed out by the experts, these patients could have been treated at district hospitals or other levels of medical services, with an appreciable proportion suitable for outpatient care.

Our calculations indicated that the inappropriately utilized beds constituted a reserve of conditionally spared beds by hospitals as follows: Blagoevgrad, 138.6; Vidin, 182.8; Gabrovo, 124; Pazardzhik, 180.6; and Yambol, 135.7.

There has lately been a growing trend toward polyclinical services delivered as "home stationary care", an economically more advantageous form of stationary care to which patients are giving preference.

In our opinion, with improving housing conditions, the funds spent for inappropriate use of available hospital beds could be redistributed to provide for expanding the more economical form of patient management, the "home stationary care".

MORBIDITY INCIDENCE AND APPROACH TO PREVENTION OF THE IRON-DEFICIENCY ANEMIAE

M. K. Nasaretyan (USSR)

The iron-deficiency anaemiae — a most often observed variety of anemia and one of the most propagated form of deficiency pathology. Among the population of Armenia they constitute 74 % of all anaemiae.

The iron-deficiency anaemiae are such diseases, in which it is possible to determine exactly the range and character of the therapeutic-preventive measures and out-patient follow-up and treatment, as well as to evaluate the effect of treatment, carried out. The planning of the preventive and therapeutic measures is impossible without precise knowledge of the incidence of the pathology and of the factors, bearing an influence upon it.

For studying the incidence of the anaemiae we have elaborated a program for mass screening investigations, possessing sufficiently high sensitivity (93.8 %), specificity (93.6 %), reproduction capacity (84.7 %). The investigations were carried out in the Armenian SSR on representatively selected groups of the female population, since the problem of IDA is particularly important for the females.

As a result of the performed study it was established that anaemiae in the females of Armenia amounted to 9 %.

This index is slightly lower than the incidence of anemia among the females of the city of Leningrad (11 %) and of Eastern Sibir (14 %), not comparably lower than that in certain foreign countries (Turkey — 55 %, Iran — 34—55 %), and slightly higher than that in the Scandinavian countries (5.3—7.3 %). During the investigations appeared the factors, determining the risk for occurrence of the disease (group of factors of social-hygienic character, biological, medical, environmental, mode of life, etc.). Namely they helped us to elaborate the program of prevention of the anemias, to form the groups for differential outpatient follow-up. The incidence of anemia in the various age groups was different. In the group of 40—44 years it reached to 16 % and in that of 45—49 years — to 17.8 %. It correlated with the increase of the number of childbirths and the age of the parturients. It was established that in females, having chronic diseases, the risk of occurrence of anemia increased. It has to be noted that when the indices of iron metabolism were studied, it was found that iron deficiency in healthy females with hemoglobin level was observed in 18 % of the examined, i.e. by twice more frequently than the finding of anemia. This meant that no specific risk — factor rather appeared, but also the possibility to determine the groups of females in the early stage of the disease.

On the basis of the study of the problem, preventive measures were elaborated, at the basis of which the principle of out-patient follow-up of the population was laid. Selection was made of 3 groups for out-patient follow-up and treatment. The objectives of the out-patient follow-up of the females of group I was the prevention of development of anemia in individuals, having the risk factor, correction of the symptom-free hyposiderosis, prescription more correct nutrition and mode of life, medical survey during pregnancy and puerperium, organisation of the working environment, etc. The females of this group were submitted to full examinations. Particular attention was paid to those of them, who earlier had anemia.

The main task of the out-patient follow-up of the patients in the next two groups was prevention of progressing anemia and its negative consequences, diminution of influence of anemia upon pregnancy and delivery, preservation of the working ability.

In the elaborated system of preventive measures we recommend a new method for propagation of medical knowledge among females by means of the created by us, on the basis of the performed investigations and establishment of the leading risk factors, tabular play "Way to health", by means of which in an accessible and vivid form revelation is made of the fundamental factors, contributing to and preventing the development of sideropenia and iron-deficiency anemias.

This play acquired mass application in the therapeutic-preventive establishments in Armenia (hospitals, out-patient departments, obstetric services and maternal welfare centers, sanatoriums, etc.).

Thus, the prevention of iron-deficiency anaemiae is based upon notions for the incidence of the pathology, its regularities and factors, exerting an effect upon it. The planning of the measures, resources and the realization of the program must be coordinated with the general program of prevention and public health development on the territory.

STOMATOLOGIC AID TO THE WORKERS OF THE INDUSTRIAL ENTERPRISES IN THE CITY OF BURGAS

S. PEEV (PRB)

The Burgas system of installation is characterized by the presence of the greatest territorial-producing complex in South-Eastern Bulgaria. On its territory 80 % of the naphta-processing and naphta-chemical industries in the country, 82 % of waggon production, 96 % of the fish and fish-processing enterprises, all the production of cast-iron radiators and cable production are concentrated.

The principal part of the city population are the industrial workers. This determines a certain specificity of the organization of the stomatologic aid and requires the ensurance of its high effectivity. At present we are working on the creation of a modern system of stomatologic aid to the industrial workers, ensuring high medico-social and economic effect at minimal expences of material and labour resources on behalf of the decrease of the time for attendance of the patients requiring stomatologic aid and of its quality raise.

The new, approved by the Ministry of Public Health, organization form of the stomatologic aid to the workers, represents the additional stomatologic services afforded by the District Stomatologic Out-patient Department according to agreement with the socialistic enterprises.

For improvement of the stomatologic aid to the population and firstly to the workers of the industrial enterprises since September 1, 1984 the District Stomatologic Out-patient Department passed to two-shift work all days of the week according to a sliding schedule.

Thus on saturday and sunday priority in the attendance is given to the workers of the industrial enterprises, who are treated according to preliminary plan-schedule and have the right for free choice of the stomatologist.

At present, when out-patient stomatologic follow-up of all industrial workers is not yet realized, the reliable methods for obtaining of data for the affections of the teeth are the materials from the mass stomatologic screening.

The needs for the attendance of the industrial workers in the city of Burgas with respect to stomatologic manpower and auxilliary staff we assess by means of detailed processing of the morbidity materials according to the data of the medical examinations and by determination of the necessary number of the visits for treatment of the manifested tooth pathology and the associated with it volume of the curative aid and prophylactic attendance.

The data obtained by us ensure the possibility for scientific determination of the norms for the demands of the industrial workers for stomatologic aid.

The projected and grounded perspectives for the development and improvement of the stomatologic aid to the industrial workers on the basis of which are laid the principles of departmental out-patient follow-up, the bringing near of the afforded stomatologic aid to the working place, the economical interest. For the realization of the projected perspectives it is necessary to strenghten the material basis of the stomatologic institutions and to complete the physician staff according to the norms.

USE OF MICROPROCESSOR TECHNICS FOR PERFECTION OF HEALTH PROTECTION IN SILISTRA DISTRICT

M. PEYCHEV (PRB)

Since the beginning of 1981 in the administration of public health and social security in the city of Silistra a microprocessor "ISOT 0250" was started to be used for processing of economical medical-statistical information.

When projecting an information system there are different approaches for the choice of the technical means, as well as for the fundamental principles of organization of the system. We were guided by the following principles:

1. Use of Bulgarian microcomputers of such type that could be easily supplied, served and ensures programs.
2. Elaboration of the programs and their adoption to be done in the experimental units in the structure of the organization of health protection without refusal for collaboration by external specialists.

3. Start elaboration of economical medical-demographic information, necessary for the district administration of public health and afterwards for use in the subordinate medical institutions.

For execution of the formulated principles at the end of 1981 an information system was introduced for survey of the presence, distribution and use of medical apparatuses and machines and of sanitary transport.

In 1981 and 1982 the activity was mainly directed to creation of automatic information systems, which could survey the birth-rate and children mortality and for calculation of the total, quantitative appraisal of the fulfillment of the plan by indices.

Together with these tasks, at the base of microprocessor "ISOT 1002C" a system for control of the taken decisions was installed. The introduction of the system was necessary for the ever-growing volume and complexity of the flow of new adopted programs and taken decisions, issued by different institutions for solution of operative problems.

The control on the execution of these tasks by the traditional means is ineffective. The exploitation of the system for execution of the taken decision reveals that the use of the microcomputer for control of the execution of the assigned tasks guarantees that not a single decision is missed or forgotten.

In 1984 in view of perfection of the organization of hygienic-epidemiologic activity and diminution of the flow of documents, an automatic system for management of the sanitary control was elaborated.

The system ensures the automatic printing of the sanitary prescriptions. A catalogue was made for the principal sanitary violations and the measures for their removal according to types of the objects in agreement with the normative acts.

The second regimen of work of the system ensures automatic control on the checks performed for fulfillment of the prescriptions and imposed corresponding sanctions.

The third regimen of work of the system ensures statistical processing of the basic information on sanitary control. The introduction of microprocessing technics is also started in the out-patient activities — a system is formed for centralized regulation of the receptions and automatic system for administration of the out-patient follow-up.

The introduction of computers in the managing activity of public health and social security disclosed new possibilities for rapid processing of the necessary data for solution of complex administrative tasks.

The creation of automatic systems on the scale of the whole health protection allows a considerable increase of the social effectivity of health protection and of its role in our society.

MEDICAL-GEOGRAPHICAL EVALUATION OF THE RISK FACTORS AFFECTING THE HEALTH OF THE POPULATION

N. Petrova (PRB)

The particular position of Popular Republic of Bulgaria in the Balkan peninsula, the exclusive concentration of geographical particularities in a relatively not large area, the presence of enormous diversity of natural factors contribute for the occurrence of infectious foci, representing premises to the medical-geographical aspects of evaluation of population's health.

The rapid raise of the social-economic prosperity in the country during the last decades, the technical perfection of the industry and agriculture determined the occurrence of a number of formerly not encountered factors. A near-by task represents their versatile study in the aspect of their influence upon the health of the population.

During many years we have studied the environmental factors in all districts of the country and made a retrospective evaluation of the infectious morbidity for a 20-year period. Eighteen nosologic forms of infectious diseases with natural foci were evaluated. On the basis of these data a cartographic analysis of the morbidity conditions in every district for each disease was made. Twenty-four medical-geographical charts were elaborated, which allowed the visual representation of the natural foci in every territorial unit of our country.

Detailed consideration was made of those medical-geographical factors, which represent the basis of elaboration of the medical-geographical charts.

The risk factors, affecting the health of the Bulgarian population, were evaluated by means of elaboration of various charts: gypsometric — reflecting the country relief; climatic charts; charts of the vegetal and animal worlds. This characteristic for our country medical-geographical factors were established, which essentially, as it was pointed out by our investigations, represent risk factors for the occurrence of infectious diseases related to natural foci.

To the principal physical-geographical factors on the territory of our country must be referred: relief of the country — presence of high- and middle-altitude mountainous regions and large plains and low lands, the presence of soil which by its chemical composition predisposes for the occurrence of infectious foci; particularities of the hydrologic network — stagnant waters, marshlands, swampy areas of rivers' estuaries, etc., as well as combination of several types of flora and fauna.

Concrete, geographically expressed data were established for the association of the natural factors with the natural foci of the particu-

lar diseases on the basis of a full evaluation of these factors in the different territorial units of the country.

The analysis of the risk factors is also inextricably bound with the evaluation of the social-economic conditions, which must be placed at the basis of the preventive activity of the different units of the public health network in the different territorial regions of the country. Of important significance is the fact that on the basis of the established relations between the environmental factors and the natural morbid foci an objective evaluation is possible to be presented by the health protection organs and determination of the contemporary way of more rational edification of the public health network.

Detailed consideration was made of the relations of the environmental factors with the study of the nosologic forms separately for every groups.

Thus, it was established that intestinal infections mainly depended on the conditions of nourishment of the population with decisive role of the sanitary-antiepidemic measures.

Characteristic relations for the group of blood-transmitted infections were presented by some natural factors and unconditionally stressed upon the dependence of occurrence and development of the nosologic units of the group from the sanitary-hygienic conditions of the place, population groups and sanitary-antiepidemic measures.

For the group of infections of the external teguments characteristic are firstly the natural factors, but there are also relations with the level and due time performance of the various sanitary measures.

The consideration of the natural foci of infectious diseases represents a very important problem in Bulgaria, since some of them have ubiquitous propagation.

In the present study for the first time was analyzed the seasonal role, typical for the country — grassing for the morbidity of the agricultural animals, marked seasonable morbidity was established and at the first place the significance of the temperature of the air and soil, activating the natural foci.

On the basis of all above-mentioned, when evaluation is made of the risk factors affecting the health of the population, the attention of the medical public and organs of public health must be drawn to the medical-geographic factors, concretely related to the different nosologic entities. It has to be underlined that by difference of the social factors, the natural factors are considerably less studied and insufficient attention is cast upon them. Very important is the fact that they play a role in the etiology, prophylaxis and treatment of infectious diseases with natural foci. The elucidation of the risk factors must be brought to the notion of a large circle of specialists on health protection, as well as to other specialists.

IMPROVING THE ORGANIZATION OF STATIONARY CARE FOR THE SEVERELY ILL IN A DISTRICT HOSPITAL

K. Radev (PRB)

Stationary care is a complex of diagnostic, curative, and rehabilitative actions undertaken, along with nursing, according to the patient's condition. The level and quality of such care will primarily depend on adequate staffing of the inpatient department, the deontological relations among personnel, and availability of material and equipment to meet the medicosocial and living needs of patients.

Particular problems of service delivery to the severely ill arise in a district hospital that, compared to a regional hospital, has relatively limited capabilities. Severely ill patients with impaired general condition need as a rule active surveillance, treatment and nursing. In other words, they are candidates for an intensive care ward. In a district hospital, difficulties in care for this group of patients result from insufficient means to organize high-quality differential nursing, lack of the monitoring and resuscitative medical instrumentation required in the process of treatment, etc.

In 1982, a survey was conducted by us to define the need for active surveillance, treatment and nursing among hospital patients. This need was studied with the following objectives:

- to identify the optimal form of stationary care for patients in need of active surveillance, treatment and nursing under district hospital conditions;

- to resolve the organizational aspect for part of the medical problems — stroke, myocardial infarction — as regards, notably, management of the acute stages of these conditions;

- to determine the economic effect of the organizational forms proposed for severely ill patients.

Review of 4814 records of patients treated in the hospital indicated that only 305 of them had needed active surveillance, treatment and nursing. Hospital departments differed in this respect, the proportions of such patients being as follows: rheumocardiological department (pediatric), 10.5%, surgical, 0.9%; neurological, 9.9%; rheumocardiological (adult), 3.8%; medical, 4.5%; gynecological, 0.2%; and pediatric department, 15.2%.

Thus, the frequency of patients requiring active surveillance, treatment and nursing was found to be highest in the pediatric, rheumocardiologic (pediatric), and neurologic departments.

The existing organization of stationary care on nosologic principles proved irrational for severely ill patients, in that it led to involvement of patient relatives in the process of treatment and nursing.

This cannot be approved either from the medicopsychological or from the economic standpoint. Thus, relatives spent on nursing a total of 4039 days, of them 1088 days of payed leave. Moreover their absence from the workplace implied a loss of national income amounting to some 10,000 lv.

Based on the findings of this survey and, in particular, the revealed need for active surveillance, treatment and nursing, it was proposed that the rheumocardiology departments be expanded to include a section designed to meet the needs of patients for resuscitation care and for active surveillance, treatment and nursing. This section was conceived as multiprofile, to be shared by all hospital departments, except the obstetric and pediatric departments. The staff was to include a cardiologist, additionally trained in anesthesiology and resuscitation, six nurses, and three attendants. Consultations were to be given, as needed, by specialist physicians from the remaining departments, and continuing duty to be provided by therapists and neurologists (according to the current composition of patients in the section).

Such a section was set up and supplied with resuscitation and intensive care facilities. Treatment of patients with stroke or myocardial infarction proceeded as a complete cycle of curative-diagnostic and rehabilitative care.

The section contributed to more rational utilization of manpower resources by intensifying the activities of physicians and intermediate-level personnel.

With opening of the section, more patients with stroke or myocardial infarction were admitted to hospital treatment. Despite increased admission of severely ill patients, lethality from stroke was reduced by 15.8%, and from myocardial infarction by 10%. Patients with arrhythmic disorders of the heart are also successfully treated.

Establishing in a district hospital a unit serving all its departments for severe cases, regardless of the nature of the condition, is, to our mind, an optimal approach to improving the quality of stationary care for the population. Considering its functions, such a subdivision appears to be designated most appropriately as "Section for active surveillance, treatment and nursing".

EPIDEMIOLOGIC METHOD OF EVALUATION OF THE INCIDENCE OF CHRONIC NON-SPECIFIC LUNG DISEASES AND ITS SIGNIFICANCE IN THE OUT-PATIENT FOLLOW-UP

I. N. Stepanov (USSR)

On the basis of the unified epidemiologic methods of WHO (1974) and of the All-Union Scientific Research Institute of Pulmology by the Ministry of Public Health of USSR (1975), adapted to the local conditions and to processing by computers, we carried out examination of 10200 individuals in the cities of 6 different districts of Latvian SSR (I. N. Stepanov, 1984).

The results of the epidemiologic investigations on the incidence and peculiarities of the clinical manifestations of the chronic non-specific lung diseases (CNLD) in Latvian SSR revealed that among the population of the republic the principal symptoms of CNLD were manifested at an incidence of 3.7 to 43.1% by a mean incidence of chronic bronchitis, i.e. individuals suffering from chronic cough and expectoration of II and III degree of severity, equalled to 11.6 — 0.2%. On the basis of our investigations, region incidence of CNLD in Latvian SSR was determined and established were the factors of the environment and of the social microenvironment (atmosphere pollution, climatic peculiarities, occupational noxiousnesses, smoking, past history of diseases of the respiratory system, etc) influencing the incidence of this pathology among the population of the republic.

The record of the factors of the relatively extensively propagated CNLD in the republic, the level of possibilities of the republican pulmonary services, the intensification of the scientific investigations in this field allowed to proceed tightly to the out-patient follow-up of the groups of population according to the signs of presence of CNLD on the basis of the elaborated with our participation methods and organization forms of the registration and survey of the mentioned patients.

As it was pointed out by the comparative analysis of the results of complex automatical medical examinations of the population and investigations of the selected groups of the population, the data, obtained by means of screening, gave a high index of reliability of the manifestation of the early CNLD forms (95%). The effectiveness and foundation of the suggested system of selection for out-patient follow-up groups with CNLD confirmed the results of the carried out by us mass examination of the population: on the basis of anamnestic data, fluorgraphic investigation of the chest in anterior-posterior and lateral projections and investigation of the external respiratory function were even detected early forms of CNLD, which earlier were not registered.

As a results of our epidemiologic investigations, the risk groups for being affected by CNLD were established, found in the structure of the out-patient follow-up groups in the process of annual general out-patient follow-up of the population of the republic. A number of effective organisation decisions were suggested:

- realization of the integration of the phtysiatric, pulmologic, X-ray, oncologic services in the republic;

- elaboration of methods and procedures for selection of pulmologic patients for out-patient follow-up in the dispensaries and the out-patients departments of the establishments in the republic;

- proposition of methods for early detection of patients with non-specific lung diseases on the stage of occupational examination, distribution of the patients into four principal groups for out-patient follow-up in the antituberculous establishments;

- elaboration of the principles of selection of the patients for treatment in hospitals and sanatoriums;

- determination of the measure for secondary prevention of CNLD, including labour readjustment and improvement of the conditions of life of the patients;

- creation of an unified system of selection and direction of the patient groups four out-patient follow-up to the All-Union Labour Expert Commission.

The totality of the above-mentioned measures allowed to reduce during the last 3-4 years the incidence of exacerbations in the patients with CNLD to an average of 6.9% to shorten the term of temporary loss of working ability to an average of 7.9 days per 100 workers, to reduce the incidence of passing over to primary working disability to an average of 2.9 cases per 10 thousands of the population, to stabilize the indices of mortality from diseases of the respiratory organs.

PREVENTIVE PROGRAMS AND THEIR INFORMATIVE ENSURING UNDER THE CONDITIONS OF URBAN OUT-PATIENT DEPARTMENTS

V. P. Stonogina, E. G. Fedorova, D. A. Manno (USSR)

In the realization of the "Complex program of work on the intensified prevention of diseases and consolidation of the health of the population of USSR for 1985—1990" a principal role belongs to the primary units of public health — the out-patient departments.

The city out-patient department in its work realizes all kinds of prevention, formulated by the experts of WHO (primary, secondary, tertiary).

In the tasks of primary prevention are included the establishment of the groups and factors of risk, preservation of the health of the healthy individuals, propaganda of the healthy mode of life by means of detection and removal of the causes, which could induce diseases of pathologic conditions.

On the present stage, a leading role is assigned to the district physician-therapist, coordinating the efforts of all divisions of the out-patient department in the realization of the tasks on primary prevention, realizing the interaction with other therapeutic-preventive institutions and with a number of state and public organizations (Sanitary-epidemiologic stations, medical-genetic consultative centers, homes of sanitary enlightenment, industrial enterprises).

Important significance is assigned to the exact organization and performance of the preventive examinations with respect to the formation of the groups with increased risk and to professional selection. Much work is also done on the improvement of the training of medical manpower in the field of prevention, hygienic education of the population and formation of the healthy mode of life.

The principal objectives of prevention are the early detection of the signs of impaired health, timely diagnostics of the diseases, qualitative treatment and follow-up, aimed at prevention of the complications and relapses in view of minimizing the loss of working ability. In the realization of these tasks a foremost role belongs to the preventive examinations aimed at active detection of diseases in their early stages and distribution of the patients into groups of observation:

1. Patients with chronic diseases;
2. Individuals, having suffered from acute diseases;
3. Patients with congenital genetic diseases and defects of development.

In the organization of the out-patient follow-up on a definite stage, a clear continuity and consequence in the survey of the patients by specialists of various profiles, by the principal divisions and services of the out-patient department, as well as by other establishments and administrations (hospital, workers' hospital, sanitary-resort establishments, industrial enterprises) are necessary.

In the objectives of tertiary prevention on the level of out-patient department are included preventive treatment and rehabilitation of the patients and disabled individuals, directed at prevention of exacerbations of the diseases, recovery of the working ability, early return to society and to socially useful work. The role of the out-patient department on this stage consists not rather in the realization of the medical, social and occupational aspects of rehabilitation, but also in the coordination of all stages of the recovery treatment. Here are included: proper out-patient departmental, including out-patient fol-

low-up, in-patient (treatment of the exacerbations and stabilization) and sanatorial (period of mobilization and development of the compensatory possibilities). The real realization of the complex of rehabilitation measures supposes interaction in the work of all out-patient departmental links with the organs of social security, hospitals, special dispensaries, sanatorial-resort establishments, administration of the industrial enterprises.

For evaluation of the work of the out-patient department on the realization of the preventive work it is necessary to determine: — level of the object (individual, familial, collective), — working team, adolescents, — necessary character and quantity of information about the object, — system of statistical indices on the organization and appraisal of the effectiveness of the preventive measures.

According to our opinion, a less developed, but perfectly necessary link in the realization of prevention is the informative ensuring on the level of family. The ambulatory card, principally containing information of medical character, gives no characteristics of the family from medical and social-hygienic point of view.

The out-patient follow-up of the whole population foreshadows the necessity of creation of formal individual passport of health, containing information of the results of the dynamic medical follow-up, information of social-hygienic and occupational character, which could allow to evaluate the effectiveness of the therapeutic-preventive measures from the point of view of a systematic approach. For the characteristics of the health status of the working team, information is necessary on the conditions their mutual work, so that collaboration could be obtained with the territorial sanitary-epidemiologic station.

The established at present system of statistical indices on the appraisal of the organization and effectiveness of the preventive examinations, out-patient follow-up and rehabilitation measures substantially allow to obtain the necessary characteristics, still must be further developed, particularly with respect to the integration and complexity of the approach, like the other services and departments on the basis of the extensive utilization of computers and mathematical methods.

ON IMPROVING ORGANIZATIONAL FORMS OF TREATMENT UNDER POLYCLINICAL CONDITIONS

J. Trajkov (PRB)

Over 1984, Polyclinic No. 20 in Sofia was the site of an experiment on organization of "home stationary care" as one of the orga-

nizational forms of outpatient care delivery by a polyclinic. The experiment was undertaken with the objective to evaluate the medical, social, and economic effectiveness of "home stationary care".

The study covered a group of medical patients aged above 15 years receiving the necessary curative-diagnostic care from the polyclinic, with prescribed drugs delivered free of charge.

Polyclinic No. 20 (Sofia) serves a total of 65 thousand subjects, of them 52 thousand older than 15 years. Included in the experiment were 15 therapeutic local areas. During 1984, a total of 955 stationary patients were treated at their homes. Their distribution by age was as follows: 15—18 years, 4.9%; 18—44 years, 18.9%; 45—59, 21.8%; 60 years and older, 54.5%. Of them, 37.6% were males, and 62.4% females.

Distribution by disease groups: respiratory, 42.6%; cardiovascular, 25.4%; genitourinary, 7.5%; digestive, 4.5%, etc. Pneumonias amounted to 19.4% of all cases.

Distribution by treatment outcomes: cured, 39.0%; improved, 55.3%; unchanged, 3.2%; worsened and subsequently hospitalized, 1.9%; deaths, 0.6%.

Analysis of the cases dying at home or with aggravation of their condition in the course of domiciliary treatment showed no evidence that these outcomes were caused by the mode of treatment or by differences in nursing between home and hospital. Fatal outcomes and worsened conditions occurred in elderly patients suffering from severe chronic diseases and repeatedly treated, both as in- and outpatients. Neither fatalities nor aggravated conditions were observed among young patients with acute conditions. In 63.1% of all home treated cases, patients were self-servicing; in 36.9% they were catered for by family members. Provision of special diets was necessary in 47.6% of cases; however, this proved feasible only in 40.6% of cases.

The experiment was carried out, without resorting to additional expenses, by means of intensifying the work of medical personnel and making more rational use of social and household resources available at the patient's home.

For patients under "home stationary care", the curative-diagnostic process was provided by the local-area therapist. He visited patients, as needed, once, three or more times a week. The local-area nurse visited patients and carried out prescribed therapeutic and rehabilitative procedures every other day or, where necessary, every day. These activities were performed by the therapist and nurse within the time span scheduled for domiciliary visits; the actual time taken amounted to 80% of scheduled time.

Where necessary, the attending physician took steps ensuring consultations with narrow specialists from the polyclinic, laboratory

tests, physiotherapeutic procedures, and, in part of the patients, 24-hour monitoring of the severely ill, drawing on polyclinic teams on duty (at nighttime, on weekends and off-work days).

Questions of sick leave and sick-nursing leave were settled according to existing guidelines.

Five pharmacies in the polyclinic district dispensed drugs free of charge on presentation of special prescriptions for patients on "home stationary care".

Evaluation of economic effectiveness indicated that intensified utilization of resources available to the polyclinic had resulted in national economy savings equivalent to 35 hospital beds occupied throughout the year. Further expansion and improvement of "home stationary care" presupposes a necessity to redistribute resources between polyclinics and hospitals.

The patients included in the experiment expressed approval of the possibility to be treated at their homes.

As shown by the experiment, management of medical cases by "home stationary care" delivery, as one of the organizational forms of out-patient polyclinical treatment, is not to be neglected. It is a form supplemental to inpatient treatment that allows part of the patients to complete their "stationary treatment" under polyclinic conditions. The opportunity is thus offered to re-orient hospital efforts and resources to some issues in organization of specialized and intensive medical care, as well as to raising the quality and culture of inpatient nursing.

A number of questions arose in the course of the experiment, indicating ways in which this form of the polyclinical curative-diagnostic process can be improved: reinforcement of local-area teams with intermediate-level personnel; search for forms of incentives to the medical personnel engaged in intensive activities; regulation of domiciliary consultations with specialists, etc.

SOME TOPICS OF THE ORGANIZATION OF FAMILY OUT-PATIENT FOLLOW-UP

E. Shipkovenska, R. Toneva (PRB)

In view of elucidation of the discussional topic, related to the development of family out-patient follow-up, we made our object a pilot by its character study on some medical-psychological and organizational problems concerned with the further development of this form of out-patient follow-up.

Information was collected by an inquiry-statistical method from

the chief and deputy-chief physicians about their opinion for the introduction of family out-patient follow-up of the population.

The inquiry included 79 chief and deputy-chief physicians in 20 district.

Only one of all inquired persons considered that presently the district general physician is ready for the transition from the out-patient follow-up of the separate individual to follow-up of the whole family. Many considered that for the ensurance of the follow-up of the inhabitants of the medical district great districts with up to 2000 adult individuals are necessary, requiring prolonged and continuous work of the district general physician on the concrete medical district and additional professional preparation.

Half of the inquired persons recommended the realization of the family out-patient follow-up by specialists of "general medicine", who must have wide professional preparation. Other recommended the formation of complex teams, including physicians of various specialties, psychologists, social workers, who will work according to an unified plan. The necessity is pointed out for the acquaintance of all situations of the family health — from the genetic to the mode of life and behaviour. The inquired persons laid emphasis on the significance of theoretical and practical preparation of the family doctor on these topics. Some of the inquired persons drew the attention on the personality of the physician, on his capacities for creation of sincere confidence in the relations between him and the patients, respectively the family and for use of these relations in the purpose of fulfillment of his professional tasks. According to the opinion of some of the physicians, at present there is lack of substantial stimuli for the propagation of namely this form of medical attendance of the population. They express opinion that the limited possibilities of the therapists in the field of organization of their working time complicates the execution of tasks on the out-patient follow-up and recommend the following: at the present stage the attention of the physicians must be drawn mainly upon the "needing aid" families (the so-called families at risk), as the principal requirements for solution of the family problems must be the wide engagement of the society and the whole population, as this problem is predominantly of social character.

In conclusion we consider that for the introduction of family out-patient follow-up in our country the following is necessary to be taken into consideration:

1. The guiding points for drawing up of the program of family out-patient follow-up must be the resources (base, manpower, technical equipment), which could be rationally afforded for its realization.

2. Up to the introduction of a national program it is necessary to elaborate patterns of systems for the corresponding groups of popu-

lation and test them in view of determination of the necessity of each element of the system (physician-out patient follow-up executor, his necessary qualification, exchange of information, participation of the state and public organs and organizations in the solution of the social problems of the family) and determination of the effectivity of the program from the point of view of liquidation of diseases, acceleration of the recovery processes, etc.).

3. Since the participation of the population represents the major fact, ensuring the success of the realization of the preventive programs and taking into consideration the possibilities of the health protection at this stage, at first the family out-patient follow-up must involve only the population, subjected to risk.

PRESENT STATE AND DEVELOPMENT OF MEDICAL DOCUMENTATION IN THE PRB

P. Tsonov (PRB)

With rapid changes occurring in information technology as applied to health care, higher requirements have to be met by medical documentation and modes of primary registration. Medical records today are designed for two broad uses: (1) direct — to reflect the course of the curative-diagnostic process in the interest of patients and attending personnel; and (2) indirect — for managerial activities serving organizational planning, monitoring, referring, and reporting purposes. It should be noted that in both cases medical records reflect the quality and culture of medical services. Provision of information and documentation on curative establishments encounters difficulties arising from drawbacks such as the following:

1. Medical data are still being entered in a descriptive, textual and extended form.

2. There is a large amount of unofficial documentation of various types, such as books, notebooks, registers, references, summaries and notifications, an appreciable part of which relates to excessive accounting, a tendency to be overcautious or to underline one or other type of circumstantial activities.

3. Insufficient use is made of "small mechanization", i.e., devices aiding organization, in the process of delivering medical services (in the doctor's room, registration office, archive). As a result, workplaces tend to become crammed with documental materials that cannot be handled efficiently.

At the present time Bulgaria has laid the foundations for unifying and formalizing medical records in order to improve and raise to

a contemporary level health information and documentation availability. Newly introduced are State standards and sectoral forms for medical documentation, establishing basic provisions, types of medical documents and card patterns. Rules have been set for the sequence of design, adoption and maintenance of a unified system of health and social welfare documentation. Development efforts are needed to bring in correspondence some guides and guidelines calling for complicated managerial procedures and manyworded registration. Work is also under way on a series of other normative documents pertaining to the information base: indicators, nomenclature, informational aids for the general health network.

Many medical documents have been formalized and adapted to mechanical processing in view of providing input data for automated information systems concerning, for instance, morbidity with temporary disability, morbidity with permanent disability, outpatient-polyclinical and inpatient morbidity, and facility activities. There is also a trend towards designing problem-oriented medical documents that, as shown by experience, are time-sparing in registration and contribute to improved quality of medical services. Establishing such problem-oriented and formalized documents appears particularly promising in the case of Medical Academy facilities and regional hospitals, where the level of information/documentation availability should not lag behind that of the existing curative-diagnostic equipment.

With widespread introduction of computerized technology in health establishments, there is a perceived need for making available to medical personnel organizational devices and registration aids such as: typing machines and automates; dictophone, copying, and address equipment; card-file stores of various types and sizes.

Finally, it should be emphasized that the "medical documentation household" is indeed being gradually superseded by modern information carriers compatible with computerized technology. However, "paper" medical information is still to remain at the base of information processes in medical establishments. It is on the extent of its unification, problem-orientation and document turnover that will tremendously depend the effectiveness of computerized technology applications.

HEALTH MANAGEMENT MANPOWER TRAINING AT THE PRESENT STAGE

CONDITIONS AND PERSPECTIVE OF WHO ACTIVITY ON THE PERFECTION OF THE PROCESS OF MANAGEMENT OF THE HEALTH MANPOWER

V. A. Alexeev (WHO)

The problem for rational organization of the management of manpower has been and remain actual in the system of health protection on national, as well as on global level. In whatever country, notwithstanding the level of ensurance with medical personnel, it does not go down from the order of the day when there is speaking about the improvement of medical care.

Some countries are taking care to ensure the necessary level of medical aid under conditions of limited manpower ressources, other keep to the solution of this task under good manpower ensurance, bordering to excess. Equally in one and the other case the way towards solution intersects in this sphere, known under the term of management of manpower, which in other words means rational displacement and use of manpower ressources.

On the present stage of WHO activity, this direction as composite part of the programs for manpower development assumes the significance of a priority one study of the solution of the tasks on the mobilization of the national ressources in view of realization of the global aim health for all about the year 2000.

Generally in the work, carried out by the countries, a determination has been adopted, according to which the activity of manpower management consists in mobilization, motivation, development and realization of the creative activity of people in the process of working activity and through it. The manpower management is realized with the perspectives of achievement of three aims:

- individual aims of the workers themselves.
- aims established by society,
- concrete aims of the organization, within the structure of which people are working.

Without going into details in the content of the above-mentioned aims, it is necessary to note that each one of them creates premises, as well as obstacles for the realization of the remaining. For this reason, by itself the process of manpower management is sufficiently complex

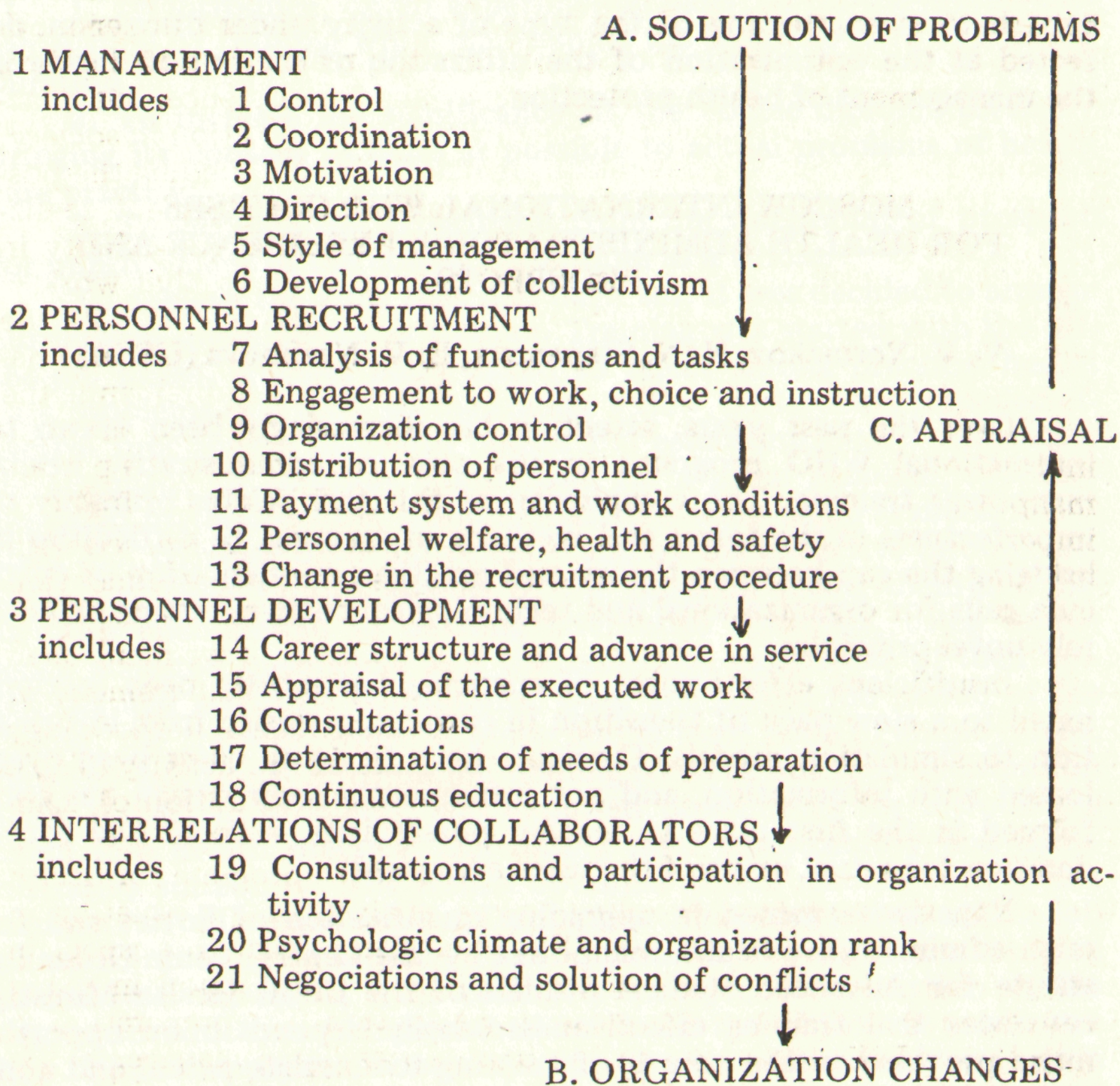
and in this sense its rational organization represents and activity requiring from its executirs special qualification and, which is very important, corresponding complete orientation. The latter could be expressed in the following way: individuals working in the health system, as well as in other spheres, appear not only factors ensuring a definite

result of the work, but also personalities, requiring to obtain satisfaction from their work. In the individuals, responsible for the work with manpower, must be formed the respective approach and understanding of the given problem. In its basis lays the realization of the fact, that work — not only means for getting means for existence, but a factor giving man the possibility to occupy a definite position in society, assuming the himself the execution of a definite role, finding the possibility to collaborate with others, receiving acknowledgement, realizing his creative abilities and “manifesting” himself as personality in the broadest meaning of the word. It becomes evident, that work — not the sole channel to satisfaction of man’s requirements. At the same time this fact, that great part of his life passes at work and namely there he finds satisfaction of many of his vital requirements, the performance of work concerned with manpower management is exclusively important. All these situations, actively adopted by the participants in a number of conferences, organized by WHO in the frame of the problematics, related to perfection of the activity concerned with manpower management in the countries, were laid in the foundation of a number of initiatives in this field.

Particularly, on the basis of the adopted and above-mentioned determinations of what must be understood under management of health manpower, WHO elaborated and recommended a methodology of situation analysis, suggested for the structure of this activity (Table 1) and education materials were elaborated for preparation of manpower in this field.

The work carried out within the frame of the program for health manpower management according to the analysis of the situation in the countries, gives us reason to draw conclusions that this aspect in the organization of the management of health protection in many countries does not attract the necessary attention. The preparation of leaders of health protection in the field of personnel management is either poor or not executed. The necessary educational materials, programs of teaching, lecturers mastering these materials are lacking. In some countries there are special manpower services within the frame of the structure of health management, which role, nevertheless, is so degraded that sometimes is reduced only to registration of inquiry data concerning the staff: The facts, obtained in the total amount of the carried out by WHO work in this direction, give evidence that there are concealed enormous reserves for strengthening of the system of health management, which could be relatively easily mobilized and, moreover, at the cost of minimal investments. For this it is necessary to revise the structure of manpower services, to proanalyze the composition of the individuals, engaged in them, to revise their work, enlarge their obligations and responsibilities according to the significance

Table 1. Functions and elements of health manpower management



with which this activity ought to be filled and to organize the preparation of these individuals. There, where there is not such services, it is necessary to strengthen the corresponding manner of preparation of health managers, and to study the possibilities for this organization.

The activity on the perfection of the management of health manpower is realized within the frame of WHO programs for manpower development within the perspectives of the forthcoming two-year period 1986—87. It will be directed to afford the corresponding technical support to the countries. In this respect is expected the performance of a series of educational measures on regional, as well as national

levels, as well as rendering of other types of technical assistance on the problems of the countries within the frame of the suggested approach to strengthening of the type of activity under discussion, directed at the optimization of the utilization of the human factor in the management of health protection.

MOSCOW INTERNATIONAL WHO COURSES FOR HEALTH ADMINISTRATORS: EXPERIENCE AND PROSPECTS

V. V. Yermakov, N. N. Stepanova, E. V. Nazimova (USSR)

Over the past years, attention has increasingly been drawn to international WHO programs in the area of administrative health manpower training. The complexity of this task relates primarily to imperfectness in the forms and methods of training, to difficulties in bridging the gap between theory and practice; re-orientation of curricula calls for organizational and technological changes resting on entirely novel principles.

Insufficient effectiveness of curricula has mostly been incriminated to a slow pace of transition in curriculum design from information to simulation models. Curricula have in many cases been overloaded with information, and not infrequently their design has conformed in the first place to teacher possibilities, without due consideration for actual needs of the users addressed.

Experience gained in upgrading qualification of Soviet and foreign administrative health manpower by the Central Lenin-Order Institute for Advanced Medical Studies of the USSR Health Ministry convinces that training effectiveness wholly depends upon opportunities provided in the course of training to simulate actual and concrete situations.

The Moscow International WHO Courses for Health Administrators are conducted on a regular basis since 1962 at the Central Lenin-Order Institute for Advanced Medical Studies. Over the elapsed time, three stages of development can be delineated. The first stage (1962—1975) was a period of growing international popularity of the courses. The second (1975—1979) was characterized by decline in popularity, countries being reluctant to send participants away for a long-lasting training period. The third phase (1981 to date) was marked by improvement in the general situation, increased number of participants, and introduction of some technological innovations in organization of the learning process.

In 1983, as a result of regularly pursued efforts to improve the curriculum, the following tasks were defined:

1. To introduce, on an experimental basis, an off-the-job/on-the-job system of training while maintaining the 9-month term of training duration.

2. To increase the significance of the course diploma thesis by bringing its content as close as possible to actual problems of health care practice;

3. To evaluate the experiment from the standpoint of prospects for improvement of the course curriculum as a whole.

To achieve the aims that had been set, it was decided to arrange curriculum organization as follows. Training was started with the off-the-job phase, trainees being asked to select among practical health care problems one that, to the trainee's view, particularly impeded effective functioning of health bodies and establishments. To facilitate development of solution alternatives for a given problem, specially prepared methodological learning materials were made available. With their aid, trainees, both individually and by the collective (group) method, discussed various aspects of the problem facing them and difficulties encountered in devising alternative solutions, using knowledge acquired meanwhile and the collective experience of their colleagues and scientific consultants. Over the on-the-job period of the course, the trainees, while at home and at their posts of employment, received additional information helping to work out final decisions on their respective problems, and explored possibilities for introducing them into health practice, elucidating their practicability and administrative suitability. The results obtained in this manner formed the contents of all course papers. During the third, conclusive, off-the-job phase of training in Moscow, public presentation of course diploma theses was organized, with collective anonymous evaluation of the degree to which each trainee had achieved the objectives set before him. For the purpose, a new system of presentation and evaluation was designed and applied for the first time in course work practice. The group of trainees themselves anonymously evaluated each presented course diploma thesis by means of a special questionnaire listing nine cardinal criteria: priority, scientific contribution, practical significance, feasibility of introduction into the practice of health bodies and establishments, utilization of one's own studies, preciseness and clarity of exposition, innovative character, and shaping. Scores were given according to a four-point scale, and a performance index subsequently calculated as percentage. Statistical treatment of the data took some 15 minutes, so that the grade of a thesis could be announced during the presentation session. Inasmuch as it had been made known at the beginning of the course that such a system of

public evaluation would be employed for the course diploma work and all participants were aware that the results of their efforts would be the subject of collective appraisal at the end of the course, there was high motivation and an increased sense of responsibility among them, and this contributed to the fact that all diploma works presented were rated high, with performance indexes varying from 84.5 to 98%.

This new system of off-/on-the-job training in the Moscow International WHO Courses for Health Administrators is entirely acceptable in organizational, managerial and technical respect both for course participants and course management; therefore, it is thought that the system described should serve as the cornerstone for perspective curriculum planning in the next years. Analysis of trainee opinions indicated that the off-/on-the-job model of learning process organization had been fully appreciated. The period of off-the-job training was shortened, financial costs reduced; the time of on-the-job training provided an opportunity to check the acceptability of proposed health problem solutions in practice, while trainees were completing their diploma work and at the same time were active at the site of their basic occupation.

The experience gained in organizing the learning process during courses will allow to further reduce the gap between health theory and practice and raise the effectiveness of training for representatives from socialist, developing, and capitalist countries throughout the world.

CONTINUING EDUCATION FOR HEALTH PROFESSIONALS AS AN IMPORTANT COMPONENT OF THE HEALTH MANPOWER DEVELOPMENT PROGRAMME WITHIN THE EUROPEAN REGIONAL STRATEGY

V. Vodoratski (WHO)

In the regional strategy for health for all by the year 2000, adopted by the Regional Committee in 1981, it was emphasized that "human resources will play a key role in the achievement of health for all by the year 2000 and governments will have to take vigorous but carefully planned action to ensure that there will be enough health personnel of the appropriate types to implement their strategies..."

Therefore, the systems of continuing education for practicing health professionals should be developed in accordance with the demand of national HFA strategies in order to bring their work more closely into line with the health needs of the population and to improve

their qualifications. At the same time, continuing education programmes should take into account the need for existing health workers to adapt themselves to the changing patterns of health care and public health administration and to give better service to the community.

Up till now, continuing education programmes have focused mostly on the gaining of new knowledge and skills, particularly of those health workers operating in secondary or tertiary health care institutions rather than on those in primary health care. There may be valid reasons for such a reality. It may be easier, more convenient and less demanding on cooperative efforts to organize and implement continuing education activities in institutions such as hospitals, where a group of personnel is gathered together, rather than in primary health care settings. Nevertheless, in spite of the difficulties identified and observed, provision for the continuing education of multiprofessional primary health care teams is of the highest, repeatedly confirmed priority at this stage of the implementation of the HFA2000 goal in the European Region.

The tasks of primary health care, as defined by the regional strategy, can only be implemented through a collaborative approach involving all members of the the primary health care team. With rapid progress in the health services and technology, and changes in health care delivery, relevant continuing education is one of the most important instruments necessary to reach the goal.

Patterns of continuing education should be sought and promoted which make feasible, useful and attractive the participation of primary health care teams in continuing education, notwithstanding working conditions of geographical separation, sometimes in isolation and generally being overloaded with work both within and outside the health sector in the community. For them, continuing education should be organized whenever feasible in community-based "in-service learning" forms, promoting self-directed learning and self-education. The providers of continuing education and educators together with health service managers must ensure that continuing education programmes will meet community needs, will improve the quality and efficiency of health care and will contribute to more effective utilization of resources. At the same time, evaluation — including contents and methods — should make possible the assessment of the impact of continuing education in these areas.

For this purpose, it is essential to make a precise task analysis — an analysis that includes what competencies are needed to perform the tasks as well as the technique necessary to make an accurate assessment of these competencies and their application. It is generally easier to make an assessment of health workers' ability to perform a task;

it is more difficult, yet much more important, to find out whether he actually practices this. In order to measure the efficiency of continuing education, it is necessary to assess the application of all relevant knowledge, skills, values and attitudes.

Although many new and efficient educational strategies and techniques have been developed and used in basic/undergraduate and post-basic/postgraduate education, they are scarcely used in continuing education activities. The main reason, among others, is that the majority of teachers in continuing education has not had the opportunity to be properly trained.

Assessment has been attempted and the impact on the quality of health care to some extent measured of cases in several European countries where serious attempts have been initiated to apply the relevant knowledge, skills, values and attitudes of health workers in general and members of primary health care teams in particular. Unfortunately, both information and bibliography regarding these attempts are scarce. It seems that no comprehensive review of the literature exists in the European Region.

Taking into account the role of continuing education in the development of the primary health care initiatives contained in the regional strategy for health for all by the year 2000, the WHO Regional Office for Europe is undertaking a study on systems and organization of continuing education for the health professionals at country level.

The study is aiming to accumulate evidence and prove the feasibility and potential efficiency of continuing education programmes for primary health care teams, as well as to demonstrate that continuing education is one of the important instruments for implementing health services manpower development (HSMD) in the gradual achievement of the regional targets in primary health care related to the HFA2000 goal. At the same time, it will support and enhance the attempts already undertaken in Member States and stimulate new initiatives within the suggested strategy in promoting continuing education programmes for the members of primary health care teams.

As an outcome of the study a methodology based on the new concept and approaches to the national systems and programmes of continuing education integrated with supervision and career development at all levels of the health system and aimed to maintain or upgrade technical and managerial competence, performance, leadership and commitment to achieve HFA/PHC goals, should be developed.

TRAINING OF ADMINISTRATIVE HEALTH MANPOWER IN THE LIGHT OF OBJECTIVES ARISING FROM SCIENTIFIC-TECHNOLOGICAL PROGRESS

M. V. Murav'ev (USSR)

1. Health administrator training is facing a growing challenge regarding its quality, with demands for differentiation by functions and for integrated learning; questions have thus arisen as to contents of training and objective criteria in evaluating qualification.

2. Training and promotion of qualification are founded on the principle of sequential and coherent schooling, where three broad stages can be distinguished: basic medical education, special medical education, and continued medical education.

3. Comprehensive and objective evaluation of a specialist's qualification becomes possible only after his activities have been subjected to thorough analysis in terms of clearly formulated professional and qualifying requirements allowing judgement on the level and content of his general and special preparedness to perform the tasks assigned to his job at the relevant type of curative establishment. Such concrete definition of his qualification in content and level can be given by checking against a developed model of the specialist.

The model of the physician specialized in health administration should imply, to our mind, both the structure and content of his professional activities and the sociopsychological personality features necessary to meet community needs, while observing the general principles of the existing health care system and the requirements of contemporary medical science.

4. Development, on the one hand, of professional requirements for a given job in management of health bodies and establishments — one of the most important roles in health care — and, on the other, of the postgraduate training system. The former define professional tasks and the qualification required to perform them ("what to teach for?" and "what to teach?") the latter, the forms and methods of training enabling to meet the above requirements ("how to teach?").

5. The structure of professional job requirements must include the criteria for:

- theoretical knowledge;
- a health managing physician's skills enabling to solve professional problems, and skills to make optimal decisions;
- attitudes to his own activities, to his colleagues, and to subordinate personnel.

6. Development of qualification characteristics for an administrator of health bodies and establishments does not, in itself, allow

to determine actual professional qualification and professional competence. In order to objectively evaluate the activities of a health administrator, it is necessary to develop qualification tests designed to determine in how far professional performance corresponds to the qualification requirements.

7. The structure of such qualification tests must include components reflecting:

- general theoretical grounding;
- skill to make decisions;
- sociopsychological personality features of the health administrator.

8. Substantiation of the attestation system for health administrators allow to provide training in keeping with the requirements of scientific-technological progress.

SYSTEM OF PREPARATION OF LEADING HEALTH PERSONNEL IN POLLAND

L. Vdovyak (PPR)

In Polland exists an unified and wholesome system of postgraduate preparation of leading health personnel. The entire integrity of the preparation and perfection of this personnel is directed by the personnel department of the Ministry of Health and Social Security and is realized in colaboration with the corresponding departments in the Ministry and the board of the Medical Center for Postgraduate Education.

The system of preparation of leading health personnel includes:

- basic preparation (first grade specialization on social medicine and second grade on health organization);
- permanent preparation (annual, often only 5-day course of perfection).

The preparation on social medicine is realized by the Chair of Social Medicine at the Medical Center for Postgraduate Education, institutes and chairs of social medicine at the Medical Academy. The courses of preparation and perfection in the field of health organization are carried out in the Chair of Social Medicine at the Medical Center for Postgraduate Education. Moreover, for the district chief physicians annual courses of thematic perfection are carried out with one-month duration, realized at the Moscow Lenin order Central Institute for Perfection of Physicians.

Obligatory first grade specialization on social medicine must have: deputies state district sanitary inspectors on medical problems;

deputies directors of the united centers of medical attendance on therapeutic problems; matrons in the united centers of medical care.

The object of preparation for receiving first grade specialization on social medicine represents thorough knowledge and skill, obtained during the education in medical academy, and also the acquisition of new knowledge according to the program of specialization.

The specialization study includes:

1. Two-year work on a leading post with simultaneous study under the direction of the instructor of specialization;

2. Systemic self-education and participation in scientific conferences, seminars, sessions and other forms of preparation, recommended by the instructor of specialization;

3. 6-week probation in the principal organisation subdivisions in the administration of the United Center of Medical Care and 4-week probation in the local sanitary-epidemiologic station;

4. The termination of the specialization course on social medicine takes place in the Medical Center of Postgraduate Education;

5. Active participation in the Polish Society for Social Medicine, publication of a paper in a medical magazine or delivery of a report at a scientific session.

6. Knowledge of one foreign language to an extent, giving possibility for free use of specialized literature.

The specialization terminates by an examination by a commission, which includes theoretical and test checking. The examination takes place in the institution, which realite the specialization. Condition for admission to the examination represents the written conclusion by the instructor of specialization on the fulfillment of these requirements, which are fixed in the program of specialization.

It is expected that after termination of the specialization study, the respective specialist will display his ability to utilize the obtained notions and accumulated experience in solution of problems of social medicine.

Obligatory second grade specialization on health organization must have: the district chief physicians; the deputy directors of the district health departments on the problems of therapy; the directors of the district hospitals; the deputy directors of the district united hospitals on the problems of therapy; the directors of the district methodical centers for perfection of medical personnel; the state district sanitary inspectors; the directors of the united centers of medical care; the district matrons; the heads of health departments in cities with more than 50 thousands inhabitants.

The object of the specialization study for obtaining of second degree of specialization on health organization represents thorough knowledge and skill, obtained during the teaching time in Medical

Academy and during running into professional practice, getting of new knowledge as foreseen in the program of second degree specialization.

The specialization study includes:

1. As minimum 3-year practical work as health organizer, since the acquisition of first grade specialization, with simultaneous preparation under the guidance of the instructor of specialization, being second grade specialist on health organization.

2. Systemic self-education and participation in scientific conferences, seminars, sessions and other forms of preparation, recommended by the instructor of specialization.

3. Following the specialization probation: 3-month probation in united center of medical care; one month in department of primary medical care; one month in department of social service; two weeks in sanitary-epidemiologic station.

4. Termination of the specialization course on health organization, realized in a medical center of postgraduate education.

5. Publication of papers in medical magazines or presentation in scientific sessions of at least two reports on the topic.

6. Knowledge of two foreign languages to an extent, ensuring the possibility to use specialized literature.

The specialization terminates by examination in front of a examiner board. Condition for admission to the examination is the examination is the written conclusion of the instructor of specialization on the fulfillment of the requirements, fixed in the specialization program.

It is expected that after the specialization study the respective specialist will display ability to utilize the acquired notions and accumulated experience in solution of problems of health organization.

In conclusion it could be emphasized that the above-stated system of preparation and perfection of leading health personnel in Poland entirely ensures the requirements in this field.

SOME ASPECTS OF MEDICAL MANPOWER TRAINING IN DEVELOPING COUNTRIES

D. A. Orlov (USSR)

Our century has witnessed in its second half disruption of the colonial system and appearance of an impressive number of young independent States embarking on their own towards development. The majority of these countries were classified as developing. This term translates in broadest form the socio economic characteristics of countries where colonialism left in its wake not only poverty, economic

and social retardation, and widespread illiteracy, but also a heavy heritage in terms of population health status: at least 80% of the population in developing countries had no access to even elementary health services. In most developing countries there existed but the rudimentary health care intended solely to protect the health of the colonial administration and top local bourgeoisie. With high birth rates and, accordingly, a high proportion of children in population structure (children up to 15 years comprising 40% or even more in most countries of this group), certain economic problems were generated as well as additional demands on health services.

When health establishments and manpower available to the population of developing countries are evaluated, account must be taken of their distribution; according to WHO estimates, 3/4 of health expenditures and 3/4 of medical manpower are to be found in urban areas, whose residents amount to 1/4 of the whole population in these countries. The situation with health manpower creates serious problems. Upon the advent of independence, the majority of western physicians left developing countries, so that in many of them the population was virtually deprived of medical care. Governments and health administration were compelled to give particular attention to development of national health manpower, that is, to training health personnel of such categories and in such numbers as were needed by the particular country and as corresponded to its actual resources.

The importance of this problem has been stressed by WHO, whose involvement in matters of manpower training ranks high among its activities. WHO assistance in this area takes various forms, the most frequent being sending teachers to organize or improve instruction in some discipline or other at local teaching establishments, providing support in organizing new teaching establishments as well as in planning

health manpower training and utilization, in developing curricula adapted to local conditions and needs. Furthermore, WHO has conducted a large number of short-term courses and seminars, granting fellowships for participation in them as well as in advanced studies abroad.

Contributions by industrially developed countries to formation of health care in developing countries should be directed in the first place to the greatest possible assistance in improving medical care delivery and population health protection. Unfortunately, cases occur to this day where foreign aid is inefficiently used for implementation of non-priority programs. Resources made available have been dispersed among numerous projects varying in goals and objectives.

Support may be considered optimal when it is provided with due consideration to priority health problems in a particular country. To

be taken into account are population health features specific to the country, the level of national health development, and existing traditions and customs. In deciding the direction of provided support, attention should also be given to realistic prospects for program development by national efforts upon cessation of outside support.

A number of countries, especially the USSR and socialist countries, have provided and continue to provide aid to developing countries in matters of national health manpower training. In the Soviet Union, assistance to developing countries is one of the principal directions in the international relations of Soviet health care. It includes help in improving medical care for the population, controlling infectious diseases, and expanding health care facilities.

Nearly 30 medical institutes are involved in providing education for a considerable number of undergraduate students from more than 100 countries throughout the world. In addition, specialists are being trained at research institutes and institutes for advanced medical studies. In a number of countries the Soviet Union is constructing medical schools. An important group of Soviet teachers are faculty members of university medical departments and of medical schools in developing countries.

Successful solution of the problem of health manpower training in developing countries will also be furthered by coordination of efforts of WHO, non-governmental international organizations with activities of regional and national bodies.

METHODOLOGICAL AND ORGANIZATIONAL ASPECTS OF TRAINING ADMINISTRATIVE HEALTH MANPOWER RESERVES IN THE USSR

V. Z. Kucherenko, V. Ya. Leont'ev (USSR)

Among urgent problems facing health care, driven by life itself to the forefront are the issues of administrative manpower selection, training and qualification promotion.

In the framework of actions undertaken in response to this challenge, the Central Institute for Advanced Medical Studies (ZOLIUV), requested by the USSR Health Ministry, has developed and introduced a fundamentally novel form of instruction designed to train reserve manpower for posts of chief of regional or urban health departments, chief physician at large multiprofile hospitals, and also for posts in the health ministry apparatus of the Soviet Union and its constituent republics.

This paper is concerned with the methodological and organizational aspects of training reserve manpower for health administration, as seen after 3 years (1983—1985) of experience in conducting such courses at ZOLIUV.

The ultimate objective of the courses is to train in organization of health care highly qualified specialists having mastered marxist-leninist theory and acquired the professional competence of a manager. To be successful in the pursuit of this objective, it was imperative to develop appropriate curricula and adopt a new methodological approach to the instructional process, gearing it to formation of the habits and skills required for efficient health management at the contemporary stage of society development.

In order to foster acquisition of skills for making managerial decisions, course training was based on targeted problem-solving; the input into the system were practical health needs, the output was the professional competence of a health administrator.

The conceptual model of instructional process organization provides for a rational combination of various forms of learning, preference being given to active forms. Lecture presentation of the material is minimized (15—20% at the most). Active learning forms (sessions using the group dynamics method, seminars, discussions, business games, situational problem-solving, etc.) are assigned 55—60% of study hours.

An innovation in the practice of postgraduate training for health administrators was the introduction, among active learning forms, of a one-month period of probation at regional and urban health departments, large curative-preventive and sanitary-epidemiological establishments. Probation was aimed at: strengthening links between theoretical learning and health practice, acquiring habits and skills for self-reliant analysis, generalizing advanced experience from the operation of health bodies and health establishments, arriving collectively or individually at optimal managerial decisions, etc. During the probation period, participants in groups of 5—7 persons were assigned a task to work out, applying contemporary methods of data collection and processing. Each of these course works was dedicated to a particular priority health problem of the territory covered by the health facility that was serving as site of probation. Upon completion of probation and return to the institute, all course participants convened to hear and discuss the papers, this also being a form of active training.

Such extensive use of active learning methods in training health administrators called for evaluation of their effectiveness, individually and of the course as a whole. By means of a specially devised evaluation technique, 141 participants graduating from the first three consecutive training courses for administrative manpower reserves gave opi-

nions characterizing the course as highly effective. More than 90% of trainees noted that the level of their knowledge and skills in health care organization and management had been considerably raised. Anonymous inquiry showed 87% of trainees to prefer active forms of learning acknowledging their high effectiveness. Virtually all trainees concurred in stating that the course had imparted knowledge, skills and attitudes they would certainly find useful in their future work.

Review of this first attempt to conduct training courses for reserves permits to make some suggestions for their further improvement.

It appears appropriate to introduce specialization in the courses, differentiation being made according to specific types of posts to be later held by trainees.

Currently under study is the feasibility of carrying out a pre-cycle on-the-job preparation of reserves' recruited for course participation; such preparation is envisaged to include performance of certain health planning tasks, making managerial decisions, analyzing activities of health facilities, with consideration being given to specific regional materials.

However effective active learning forms may be, there is another point of vital importance: how to select among physicians the candidates for employment in the field of health organization and management. For the purpose, the USSR Health Ministry and ZOLIUV have developed a special system of recruitment of candidates for reserve training courses, taking into account a complex of characteristics: age (not older than 40), professional performance, organizer aptitude, personality and psychological features of proposed candidates.

Initial screening and nomination for inclusion into reserves and course training is done by local health bodies, the list being subsequently approbated by the relevant republican health ministry. Definitive entry into the course is effected by order of the USSR Health Minister issued after detailed deliberation by a ministry board.

The courses operate under the sponsorship of the USSR Health Ministry.

During the course term, trainees are lectured by senior officials heading the main structural subdivisions of the Health Ministry. At the conclusive stage, trainees are received by the USSR Health Minister, who acquaints them with health strategic and long-term prospects of health development.

A FIVE-YEAR PROGRAMME OF TRAINING FOR HEALTH ADMINISTRATORS

T. Kazanlykliev (PRB)

Health administrators have an important and responsible part to play in health care. It is on their knowledge and skills that it will depend how efficiently the system's resources will be utilized, what quality of medical care will be provided.

The present stage of social and health development places high demands on administrative personnel and, in particular, on their professional and managerial qualification. In order to provide the necessary training for health administrators in the PRB, a national programme has been developed that, pending approbation, is to be implemented over the five-year-plan period (1986–1990).

The aim of the programme is to organize and operate systematic, continuous, mandatory, pertinent, and differentiated training and advanced study for all health administrators in order to assure adequate and efficient management of health services and contribute to improving the quality and effectiveness of performance by the whole system of population health protection.

The programme offers solutions on a number of important tasks:

- specifying the composition of administrative manpower to be recruited for training;
- development of model curricula for training administrators of various levels;
- adoption of modern forms and methods of instruction;
- provisions for organizational and methodological management of training;
- testing and evaluation of the results of training;
- provisions for manpower, materials and technology, and financial resources as necessary for effective operation of training.

Coverage is intended to include not only higher and intermediate level administration personnel but also their reserves. Calculations have been made of the time periods necessary to train administrative personnel and the term estimated when graduations from advanced studies are to commence.

A vital aspect of programme designing was specification of instruction contents and curriculum so as to assure relevance of knowledge and skills acquired to managerial activities at the various levels of administration. In our opinion, health administrators in the PR of Bulgaria need knowledge on the following general lines:

1. Knowledge and skills relating to the medical profession.
2. Knowledge on the object of management: social medicine, organization of health care, medical professional staffing.

3. Knowledge on the subject of management: responsibilities and functions of the health administrator, style and methods of management, organization and techniques of the administrator's own work.

4. Knowledge on the process of management: management process, technology of basic managerial activities process of manpower management, automation of managerial activities.

5. Knowledge in areas of related and marginal disciplines: health economics, medical sociology, social psychology, medical psychology, medical pedagogics, medical statistics, etc.

6. Knowledge in the area of marxist-leninist philosophy.

Knowledge under points 2 through 5 is doubtless to be given priority. Based on model instruction programmes, individual programmes should be worked out for each administrator, as necessitated by his practical work.

The programme foresees various forms of training, with emphasis on directed self-training. A complex combination of contemporary forms should provide for:

1. Acquaintance with new developments in the profession, modern methods of management, socialist organization of work and economic activities.

2. Upgrading acquired knowledge to reliable skills through introduction of active forms and methods of learning using technological tools.

3. Conditions for efficient self-training and a continuous self-education process.

As for teachers to operate the system, apart from staffs of the Research Institute of Social Medicine and the Principal Centre for Information and Calculation of the Medical Academy, the programme foresees drawing upon staffs and faculties of the Departments of Community Health and of Health Care Organization as well as very experienced specialists in community health (local managers trained at ZOLIUV, Moscow, and others).

To facilitate training of health administrators, it is envisaged to prepare special manuals, instruction and methodological materials, learning aids.

In the course of training, which is expected to be a continuous process, periodic testing will be undertaken of the degree of control over the study material foreseen as well as of the ability to apply the knowledge acquired in practice, and this is to be primary consideration in the process of evaluation, certification, career promotion and incentives.

TOPICAL POSTGRADUATE TRAINING IN HEALTH MANAGEMENT FOR ADMINISTRATIVE MEDICAL PERSONNEL: OBJECTIVES AND PROBLEMS

V. Deryabina (USSR)

Under current conditions, marked by rapid rates of social development and scientific-technological progress, professional schooling of administrative personnel has assumed increased importance in all sectors, including the health sector.

Postgraduate training of health administrators has evolved to form an independent system comprising subsystems for general and topical advanced instruction.

One of the principal objectives of such training is to induce in the administrator a re-orientation of value judgements, so that acquired knowledge can not only be upgraded to the level of conviction but, furthermore, be converted into effective action; unless this occurs, imparted knowledge and skills will hardly be translated into practice. It is vital in this connection to encourage motivation for learning, to sharpen awareness of training objectives to the point when they become the learner's own objectives, a recognized necessity and an urge to change the style and methods of his management activities.

The subsystem of general advanced training for health administrators, which predominantly uses discipline instruction, updates basic schooling in the areas of social hygiene and organization of health care.

The subsystem of topical advanced training is aimed at in-depth mastering of contemporary knowledge, skills and habits in health management, economics and planning, computer-assisted medical statistics, and health legislation. In this case, instruction predominantly uses a targeted problem-solving method and addresses a specific type of administrative post held, or to be held, by the administrator.

Training in health administration is guided by the health policy of Party and Government, with due regard for scientific-technological progress and attainments of medical science and practice. In order to be successful in realizing the objectives of training, an administrator has to master the requisite knowledge, habits and skills that will enable him to:

- use a systems approach to his own operational activities, those of the management apparatus and of the staffs and institutions being managed;

- conceive and formulate, for the relevant hierarchical level of the health system, the ultimate objectives, cardinal perspectives and directions of development, to project into the future a model of

health care designed for maximum efficiency and a concrete result;

- grade objectives and analyze the rationale of his own activities and those of the apparatus and subjects of management, identify priority objectives and problems and focus collective efforts on them, optimally combining in his work tactical and operational tasks with strategic health objectives;

- create and maintain a favorable sociopsychological climate within the collective, foster high culture of interpersonal communications, encourage an atmosphere of creative labor, urge for innovation, high expectations, self-discipline and sense of responsibility, an attitude of respect and understanding, of considerate attention to fellow beings; prevent situations of conflict. Knowingly and extensively utilize the system of ideological/political, labor, and ethical/legal education to raise performance in the collective's medical activities, while giving a personal example;

- elicit and maintain motivation for the collectivistic effect of labor, stimulate creative initiative, ensure that each member of the collective contributes his best to a high overall result of collective efforts in their sum total;

- study manpower, develop and systematically implement a staffing policy aimed at achieving an optimal staff structure, judging by demographic, professional and other indicators, with predominance of prospectively stable workers, and at ensuring stability of the collective body and coherence of management. Conduct relevant and methodical work with reserves, provide conditions arousing concern with actualization of professional growth prospects for the best workers and with objectification of criteria for their promotion to higher posts; see to it that collegiate attitudes prevail in deciding staffing questions;

- stimulate interest in continuing professional growth of each worker and the collective as a whole, in acquiring and putting to operational use new knowledge, skills, and advanced experience for the purpose of optimizing the structure of health bodies and services, and improving the process of management, its technology, managerial links, availability of information, monitoring of implementation, solution of innovation problems;

- pursue efforts, using contemporary scientific management methods and tools, to arrive at well-grounded managerial decisions; be able to cope with a problem situation by identifying the optimal alternative solution that entails the smallest risk and provides for the best result in terms of the ultimate objective of the health system;

- foresee consequences and give a well-grounded evaluation of social, medical, and economic effectiveness of the results of accepted managerial decisions and programs, as well as of the activities of the health system's individual establishments and services by levels and objectives.

PROFESSIONAL DEVELOPMENT OF HEALTH ADMINISTRATORS IN THE PEOPLE'S REPUBLIC OF BULGARIA

I. Sechanov, D. Chalykova, S. Gachev (PRB)

Professional development of administrative personnel involves use of a number of classical and modern methods pertaining to social sciences and aiming to deploy their managerial capabilities and contribute to improved performance of their diverse organizational activities.

The importance of this current problem has been emphasized by the fact that the BCP assigned priority to the "human factor" in dealing with scientific and technological progress at the present stage of constructing a developed socialist society in our country. The approach implies use of complex social methodologies for manpower growth, and adoption of sector-specific systems of personnel evaluation and professional development.

To meet this challenge, considerable research and development efforts have been undertaken by the Trade Union of Health Workers' Central Committee, in conjunction with the Research Institute of Social Medicine. Such work was in accord with the Trade Union Central Committee objectives in providing an extensive social base for promoting the role of the subjective factor within the health care system.

More specifically, study of the problem under consideration called for elaboration of a comprehensive sociological characterization and identification of the factors that underlie social practice in promoting the role of the health administrator. To this end, in accordance with the program adopted, a sociological survey of a representative sample was organized and carried out, of the character of an inquiry, stochastic in manner of dispatch, and using a first-order nest model. A total of 7000 health workers were covered, 771 of them being health administrators. Computer processing yielded an ample objective data base for problem investigation.

With regard to the subject matter of professional development of health administrations, the task of problem analysis was resolved by examining correlations between sectoral factors and their determinant indicators in the study. In most general terms, the results indicated the problem to be of a complex nature and holding abundant possibilities for improvement.

Primarily, professional development of administrative personnel decomposes into "vertical growth" and "growth at the post", that is, horizontal professional development. In contrast to the well-elaborated problem of vertical growth, the issue of "growth at the post" has

not been adequately investigated; hence, particular attention was given to the latter.

An essential feature throughout systematic problem consideration was the investigation of links between development of health workers and the subsystems of evaluation, selection, qualification, education, and stimulation.

In the course of in-depth scrutiny, it became evident that system-forming impacts derived from objective peer evaluation and that effective stimulation had a role in formation of a consistent attitude motivating to professional development and improved organizational performance. Analyzed were activities in using attestation means for selection of administrators, existing differences in criteria between health administrators and health workers, the corresponding independent variables of health manpower attestation documents and application of the competitive principle in health administrator selection, and stimulation.

Based on the analysis and its results, proposals were worked out of a practical nature.

THE ROLE OF LOCAL TRAINING SITES FOR HEALTH ADMINISTRATORS

A. N. Demenkov (USSR)

Health administrators, like any other physicians, upgrade their qualification either at institutes for advanced medical studies or at specially established departments of medical institutes.

Each region of the country, taking into account the number of available physicians and its territorial disposition, is attached to a particular institute.

The Vladimir Region is situated within the area covered by the Central Lenin-Order Institute for Advanced Medical Studies (ZOLIUV), and it is there that all health administrators from the region are trained on a regular basis. Inasmuch as our region is a typical representative of the central zone of Russia in respect of population density and age/sex structure, availability of health resources, structure of health establishments, and population health indicators, ZOLIUV trainees in health administration move for their practical sessions to health facilities of our region.

ZOLIUV offers training courses to Soviet and foreign specialists in health administration employed at republican, regional, and district level health establishments and services, and to chief physicians of individual curative-preventive establishments.

For each course, depending on its training objectives and specified tasks, a schedule is drawn up for the work to be done at the local facilities. This is preceded by drafting, jointly with ZOLIUV faculty members, a preparatory document which outlines the objectives and tasks to be implemented at the local training site and indicates time periods assigned to the informational part, the practical work at the establishment's subdivisions, interim and conclusive seminars, specifying as well the itinerary of trainee movements and staff members in charge of each stage or element of training.

In analyzing the activities of various establishments, particular attention is given to such questions as quality of curative-preventive care, linkage of services delivered by various subdivisions, effectiveness of resource utilization, etc. Trainees examine the establishment's complex development plan, enter into details of individual sections, statistical forms, technical documents. In discussing operation of the establishment, trainees often raise some points in connection with one or other of its subdivisions; on this account, interim and conclusive seminars are attended not only by the management of the establishment but also by the leading staff of departments, consulting rooms, and individual services.

The schedule of trainee work at local facilities is usually worked out according to the following algorithm:

- opening, briefing on the region and on operation of the regional health department, interim seminar;
- regional hospital, its functions, structure, organization of work, evaluation of effectiveness, prospects for development, interim seminar;
- trip to a district, operation of the central district hospital and analysis of its functions, structure, etc., interim seminar;
- trip to communities in the district, acquaintance with operation of primary health care establishments, interim seminar;
- return to the regional center, conclusive seminar at the regional health department or the regional hospital.

This general scheme is varied somewhat so as to adjust it to the type of course being given. Thus, trainees in the sanitary-hygienic profile are familiarized with sanitary-epidemiological establishments at regional and district level; administrators of pediatric services, with relevant establishments in the region, etc.

In domestic course cycles, the process of instruction is considerably facilitated by the fact that, as a rule, the composition of trainee groups is uniform with regard to type and level of the posts they hold. Also, it is common practice to use during instruction well-known abbreviations, such as "TsRB" (central district hospital), "ASU" (automated management system), "GOST" (State standard), and to

designate by their numbers various regulations, instructions, record and report forms.

In the case of courses for trainees from abroad, group composition is usually far less uniform; one may encounter side by side officials from national ministries and staff members of curative-preventive services. This is taken into consideration in specifying the program. Occasionally, provisions are made for part of instruction to be individualized so as to correspond to trainee interests.

Of great help to foreign trainees in learning the principles, rules, structures, work organization underlying the operation of local facilities are Soviet trainees taking part in courses of international composition. In the process of extra-auditory communication, they provide answers to many questions, explain missed points in curative-preventive or organizational activities.

The curriculum foresees time for discussing the important problem of adapting Union and republican regulations to the Vladimir Region situation. The picture becomes more complete when papers are presented by trainees from various regions of the USSR, giving rise to exchange of opinions and experience.

Of great value is the active participation of specialists from abroad in the process of discussing the activities of various establishments and services. The account of their experience is appreciated by Soviet trainees, teaching ZOLIUV staff members and, of course, health administrators from the Vladimir Region. Because of this, interested local specialists are always welcome to attend the interim and conclusive seminars.

Interactions between ZOLIUV faculty members and Vladimir Region health administrators in the process of drafting and implementing the training curriculum, as well as trainee views expressed in discussing various forms and methods of organizational work, lively arguments around health problems and solution alternatives under diverse conditions, all this contributes to a stimulating atmosphere of creativity and raises the effectiveness of training at local facilities of the Vladimir Region.

Active discussion of organizational questions and exchange of experience with representatives from other regions of our country and from abroad provide information and insight that, indeed, are beneficial to health development in the Vladimir Region.

THE COLLECTIVE-CREATIVE-PLAN DRAFTING TECHNIQUE

D. Chalykova (PRB)

The counter-plan — elaborated on the basis of systems analysis, targeted programming and a comprehensive approach — is central to the economic mechanism; it serves as the main tool for implementing the course, adopted by the XII Party Congress, of intensification in all sectors of national economy, including the health sector.

A counter-plan is an extensive program of productive and social activities that, in addition to guaranteeing fulfillment of the State plan, provides for attainment of appreciably higher indicator levels. What are its characteristic features? It is inseparable from the State plan, ensuring its fulfillment and overfulfillment as well as adherence to the health establishment's budget. No reserves that have been disclosed by the counter-plan can be encroached upon by any other agency, they belong exclusively to the collective. Counter-planning stimulates the collective and its individual members to search for, master and introduce attainments of scientific-technological progress and advanced experience. On the other hand, the counter-plan foresees a program of socioeconomic development for the collective of workers. This type of planning makes ample room for socialist democratism by

shifting its center of gravity to the base of the management pyramid; it dramatically raises the role and expands the rights and obligations of the primary collective in health care (department, section, branch). The collective's social standing is raised to that of a management instrument mandated on a regular basis to make independent decisions regarding its own productive activities, social development, and distribution of the results of toil. Consultative forms of worker participation in management are superseded by forms of making collective decisions, i.e., representative democracy is increasingly being replaced by forms of direct democracy. Counter-planning is one such form of direct democracy.

The collective creative plan, in essence and design technique, is a counter-plan of the primary collective in health care. Reflected in it are the productive work, the upgrading of qualification, social and political activity of all members of the collective. It is worked out by the head of the subdivision — chief of department, chief of section, Party organizer, Young-Communist-League organizer. Trade-Union organizer, then approved at a general meeting and transmitted with argumentation to the management of the health establishment.

The technique for developing a collective creative plan has been approbated during the VIII 5-year plan by primary collectives of health care throughout the country. According to the adopted technique, the plan comprises four sections.

Section I: Activity indicators

Contains the numerical values of indicators to be attained by the collective of the establishment according to the working plan. Listed in the next column are the indicator levels adopted by the collective in their creative plan at maximum deployment of reserves. Annual financial and manpower resources are planned in this section.

Section II: Measures ensuring fulfillment of adopted indicators

Specifies the steps to be taken in order to raise the quality and culture of medical care; improve organization of work; adopt achievements of medical science and advanced experience in our country, the USSR and other countries.

Section III: Measures for social development of the collective and communistic education of its members

Includes: upgrading qualification, improvement of working and living conditions, enhancement of social activity of collective members, such as competitive forms, tutorship movement, participation in studies provided by Party, Young Communist League, Trade Union; arrangements for rituals, festive occasions.

Section IV: Tasks for the administrative management of the health establishment.

The experience gained since personal and collective creative plans were introduced for primary collectives of health care indicates that they encourage:

- (a) enhanced creative activity, efficiency and productiveness;
- (b) increased motivation to qualification upgrading, learning and adopting advanced experience;
- (c) reasonable and thrifty attitude in expending resources;
- (d) improved integration of primary working collectives within a health establishment in the struggle for raising the quality of medical care;
- (e) improved social development of the working collective — provision of subsidiary services; increased input into the fund for social and cultural undertakings — improved working and living conditions, holiday recuperation, etc.

ON TEACHING HISTORY OF MEDICINE WITHIN THE SYSTEM OF POSTGRADUATE TRAINING FOR HEALTH ADMINISTRATORS

E. D. Gribanov, N. S. Zakharova (USSR)

Among the theoretical disciplines covered in postgraduate training for health administrators, an important place is assigned to history of medicine and health care, and in particular Soviet health care. Decision making between alternative solutions to current problems in optimizing medical care for the population or in undertaking active prevention measures requires a knowledge of "the history of the question" since, apart from close examination of the problem in its present-day context, it is necessary to take into account the entire past experience of health bodies and services in the area concerned. V. I. Lenin* has repeatedly emphasized that the scientific approach to a practical problem requires keeping in mind its major historical links, that each issue is to be viewed in perspective, from its emergence through the stages of its evolution, and that it is "from the standpoint of this development that one must look at how matters are standing now".

Teaching history of medicine to health administrators cannot be an end in itself. It is problematic in character, and subordinated to curriculum contents and the objectives of the particular form of qualification upgrading. A vital point is that instruction must be guided by the principle of relating the historical and the logical. The task a teacher faces is not so much to present a retrospective overview of a question as to subject it to a logical analysis.

When basic knowledge of trainees participating in administrative or clinical course cycles is examined, it appears that a considerable part of them have a largely formal, narrow-specialist understanding of the principles of Soviet health care, and hold its preventive orientation to be a continuation of the ideas and actions of great physicians from times past in various countries.

Every physician recalls from his student-days the precept of Hippocrates (460—377 B.C.): "The primary obligation of a physician is concern for the health of the healthy so that they do not become ill", and the statement made in the Middle Ages by the "prince of physicians", Ibn Sina (Avicenna, 980—1037), that medicine is necessary to enable maintaining or restoring health.

* V. I. Lenin, Complete Works, ed. 5, vol. 29, p. 176.

The eminent Russian scientist-encyclopedist M. V. Lomonosov, whose 275th anniversary of birth is being commemorated by the progressive community throughout the world, has expounded a whole program designed to maintain the health of the "people of Russia". For more than two centuries disease prevention as the primary objective of medicine has been a persisting idea in the works of outstanding Russian physicians: D. S. Samojlovich, N. M. Maksimovich-Ambodik, S. G. Zybelin, M. Ya. Mudrov. "I believe in hygiene. It is in it that true progress of science lies. The future belongs to preventive medicine."; and "Only hygiene is capable of victoriously contending with mass infirmities", thus wrote N. I. Pirogov and G. A. Zakharyan.

Nevertheless, prevention problems seen in the light of history of medicine cannot be represented as a filiation of ideas, as simple additive growth of knowledge. While acknowledging their due to leading medics of the past, we should clearly delineate the advent of a fundamentally novel approach to solution of prevention problems in socialist society.

In international circles of the medical community, including various WHO bodies, prevention is held to relate not only to medical measures, as addressed by individual recommendations, but also to socio-economic actions to be undertaken in order to ensure community health. This view has been reflected in the documents of the international conference on questions of primary health care for the population (Alma-Ata, 1979):

For some authors this appears to give reason for, so to say, "re-editing" in essence the concept of preventive orientation of health care, depriving it of its socioeconomic context.

It should be pointed out in this connection that it is the very history of socialist health care that, in fact, provides compelling evidence to the contrary: a project (program) of preventive measures is, ultimately, realistic to the extent to which it is ensured by socioeconomic and legislative commitment of a government.

In order to develop the theory and practice of prevention, a concrete historical approach must be adopted in studying methods that would provide for effectiveness. Thus, in our time, the maturity of socioeconomic conditions and the high level of material and manpower resources available to curative-preventive establishments have allowed the Communist Party of the Soviet Union and the Soviet Government to launch the health program objective of transition to annual dispenserization of the whole population. In examining this problem, it should be considered that the design, per se, is not a novelty to Soviet health care. However, the attempt made at its realization in the late 20-ies was, of necessity, bound to encounter insuperable difficulties, arising from limited capabilities of the country's

medical services and, more importantly, from the economic and socio-political circumstances obtaining in the Soviet Union at that time.

Instruction in questions of history of medicine within the system of postgraduate medical education should not be regarded as warranted by an objective limited to "applied tasks". Its significance lies, further, in the impact produced upon the physician's personality, in the shaping of his philosophy's ideological and moral contents. History of medicine teaches that, despite changes in scientific conceptions and practice (tending to occur very rapidly in our times), truly lasting and unaltered remain society's expectations of humanism and social responsibility from a physician. These aspects of history are contemporary in their significance, harmonious whatever the epoch, including our own, when mankind experiences many dramatic collisions. History of medicine helps the physician from any country become aware of his unbreakable bonds to mankind's progressive forces and find, among them, a place of dignity for himself.

HISTORICAL BACKGROUNDS TO THE CONTEMPORARY REVOLUTIONARY THINKING AND ACTING OF THE TRADE UNION OF THE MEDICAL WORKERS IN P. R. OF BULGARIA

P. Serafimov (PRB)

In 1984 the centenarian anniversary of the trade union movement of the medical workers in Bulgaria was celebrated. In 1919 under the influence of the Great October Socialistic Revolution by the directions of the Bulgarian Communist Party and with the immediate participation of G. Dimitrov, the first in the world medical trade union of Marxist-Leninistic type "Medico-sanitary Worker" was created. By means of its printed organ "Medico-Sanitary Worker" the union became an active propagandist of the Soviet socialistic health system and conductor of the social policy of BCP in the field of health protection. After 1930 the progressive tendencies and activity of the union of medical-sanitary workers were supported by the group "Public Doctor" by the Bulgarian union of physicians, headed by doctor R. Angelov. It displayed a marked activity in view of explanation of the party policy in the field of health protection and of the ideas, principles and successes of the Soviet medicine and public health system.

In the centenarian annals of the trade union activity of the medical workers were accepted a number of programmes, serving as a pattern of revolutionary thinking and acting, leaving after it a lucid

trail in the Bulgarian history. Particular was the programme of the Bulgarian union of physicians, accepted on the 10th Congress in 1912 in the city of Russe, which predicted a stage development of medicine and socialization of the physician's work.

The following programme documents — project of state health protection plan, created by the group "Public Doctor" and accepted unanimously at the 25th Congress of physicians in 1940. Some of its clauses were used in the first years after the socialistic revolution when our public health system was edified. The socialistic revolution of the Ninth September represents a turning point in the trade union movement in our country. The great son of our people G. Dimitrov determined its role and responsibility in the political system of the society and also its place in the edification and defence of the socialistic public order.

The unified trade union movement of the medical workers started its activity in the first days of the National Front free Bulgaria. On September 16 the Committee of the National Front by the Union of the Medical Workers was established. The first constitutional congress of the trade union of the medical workers took place from September 16 to 18, 1945. The participants in the congress sended a message telegram to G. Dimitrov. After the historical 5th Congress of BCP (1948) the Popular Republic of Bulgaria entered into a period of deployed building of socialism. The nationalization of the private hospitals, clinics and pharmacies, the introduction of free of charge medical care and other transformations assigned to the trade union of medical workers the corresponding tasks to become active participants, organizers and propagandists of the new socialistic transformations in the field of health protection on the basis of the rich Soviet example and experience. The Soviet initiative in the field of health protection has gained a wide popularity. After the April plenum of the Central Committee of BCP (1956) a radical turning point occurred in the general activity of the trade unions. In his lectures before the audience of the Academy of Social Sciences and Social Rule and in his remarkable speech at the 9th Congress of the Bulgarian Trade Unions, T. Jivkov characterized the role of the trade unions as a public guaranter for the implementation of the social-economic policy of the party and state. The Central Committee of the Trade Union of the Medical Workers in the struggle for intensification of the health protection during the eight five-year plan actively adopted the socialistic competition, the main object of which was the raise of the quality and culture of the medical aid by rational use of the personnel, material and financial resources. The trade union organs and organizers take an active part in the elaboration and adoption of the counter, personal and collective plans, perform major deeds with respect to introduction of the achievements of the scientific-technical progress and lead-

ing experience by means of perfection of the administrative-public system for adoption of the leading experience. Active organization work was carried out for mass propagation of professional competitions — best young physician, best medical technician, best sanitary inspector, etc. In honour of the 13th Congress of BCP, the first national exhibition-competition for inventors, explorers and rationalizers in the field of health protection was organized. The movement for “Team-host with high working qualities and medical ethics”, the youth initiative for “Work and devote my forces for the people’s health”, etc. was strengthened and enlarged. All of them are aimed at the raising of the quality and effectivity of the medical labour, protection and reinforcement of the health and working ability of the Bulgarian people.

IMPORTANCE OF MEDICAL ETHICS IN TRAINING HEALTH ADMINISTRATORS

A. V. Sapegina (USSR)

Program documents of our Party on ideological and political educative work place special emphasis on the need for organically combining political, labor, and moral education of the working people. The fact that the right of Soviet people to protection of health has been explicitly stated in the USSR Constitution adds a new dimension to the high demands made on Soviet medical workers in the performance of their professional tasks, whose effectiveness is directly related not only to professional schooling but also to the level of moral-ethical, deontological education received. It is of the utmost importance in meeting this challenge that every medical worker fulfills his obligations to the State, the community, the patient, his colleagues at the workplace, making every effort in his practical work to apply the highly humane principles of medical ethics.

In recent years increased attention has been given to the level of theoretical schooling in medical ethics and deontology. The complex program for undergraduate education at higher medical institutes in medical ethics (1976) foresees participation of all departments in teaching various aspects of ethics throughout the course of medical training. The departments of social hygiene and organization of health care offer courses in “Fundamentals of Soviet law” to facilitate orientation of future physicians in legal aspects of the problem and improve their understanding of the measure of responsibility carried in doing their medical duty to the people and the State.

However, considering the role and place of the health administrator in the Soviet health system, instruction in questions of ethics

at medical institute level is clearly insufficient for him; he has to know specifically how to apply the principles of medical ethics in his immediate activities. Apart from giving an example to his subordinates of high ethical exactingness to himself, he must ascertain that the whole collective is observing the principles of medical ethics. To this end, he must be able to use all types of educative work, to focus the activities of the collective on maximum improvement in the quality of medical care delivered and, accordingly, eliminate any causes for complaints and blame on the part of the population served.

Because of this, instruction in problems of medical ethics and deontology, as foreseen by the unified program of advanced training for managers of health bodies and establishments, during 4 study hours was definitely inadequate. Therefore, in 1983 a correction was introduced by the department of social hygiene and organization of health care at ZOLIUV in developing the curriculum of training courses for health administration reserve manpower; study hours were increased to 14 and distributed as follows:

- in the course “Selected questions of marxist-leninist sociology and social psychology in managerial activities of health administrators”, 10 hours; of them 4 hours were assigned to theoretical and methodological questions of social psychology and 2 hours to the topic “Role of objective conditions and subjective factors in formation of social psychology”;

- in the course “Theoretical bases of social hygiene and organization of health care”, 4 hours on the topic “Medical ethics and deontology in the work of health administrators”.

Experience from three completed courses for health administration reserves showed this amount of time to be optimal for shedding light on the questions referred to. It should be noted that particular stress is to be placed thereby on ethico-deontological problems arising in medicine in the context of scientific-technological progress.

Under the conditions of developed socialist society, medical ethics and deontology assume new content, problems of a new type emerge. Widespread adoption of modern technology as applied to medicine is affecting direct communications between doctor and patient and may produce a negative impact on their relations. In the context of a rising level of general and health culture in the community, the patient is more knowledgeable and aware of general medical issues and of the causes that may have led to his illness; as a result, he tends to be critical about his doctor's opinions and advice, and about the general and professional culture of physicians. Medical workers have to take this into account and meet the increased demands. On the other hand, there is a need for extensive educative work with the population in order to foster due appreciation of the toil of medical workers and form a proper attitude to health care in general, as this is an essential factor in encouraging the Soviet people to adopt a healthy life style.

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